The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1538.—Vol. XXXV. LONDON, SATURDAY, FEBRUARY 11, 1865. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 22 years.)

Holders of mining shares DIFFICULT of SALE in the OPEN MARKET may find purchasers by negociation, through Mr. Crofts' agency. Also, parties requiring ADVICE how to act as to the DISPOSAL, or ABANDONMENT, of doubtful mining stocks may profitably avail of Mr. Crofts' long experience on the market in all cases of doubt or difficulty.

SELECT SHARES FOR SALE, AT LOWEST MARKET PRICES:—South Condurrow, North Chiverton, East Vor, South Darren, North Treskerby; 25 Central Miners, ex.; 1 Billins, £13; 20 East Russell, £1½; 30 British and Foreign Mining and Financial (£2 10s. paid); all net.

SPECULATIVE SHARES AT NOMINAL PRICES:—4 Grylls, 21s.; 20 East Seton, 3s. 6d.; 30 Vale of Towy (calls paid), 3s.; 5 Wheal Caradon, £5; 5 St. Ives Allen; 40 Wheal Unity, 3s. 9d.

*** Owing to a pressure on Mr. Crofts' business hours he has been unable the last two weeks to write his usual letters to the Journal, but they will be resumed next week.

GREAT NORTH LAXEY.
From the Mining Journal of 4th February, 1865.

"This mine is attracting much attention, and it would appear deservedly so. Capt. Rowe (the manager of Great Laxey) states that, in his opinion, nearly all the immense returns from that mine last year came from the Great North Laxey lode, and he believes that the latter mine will also become a very profitable concern. In Great North Laxey the lode is already productive, and improving. In the upper part of the shaft the lode was small and poor, but in the last 15 fms. sinking it has greatly increased in size, and has produced 1¼ to 2 tons of lead ore per fm., besides some blende. In the bottom of the shaft the lode is worth full 2 tons per fm., and in a very short time new levels, at 70 fms. deep, will probably be commenced in a good course of ore. The 60 has been driven south 14 fms. in ore ground, and much better than the upper levels. A very important feature is, that after the lode improved it was only good in the south end of the shaft, whereas now it is equally good in the north end, indicating that the ore ground is lengthening in depth, which corresponds with the case in Great Laxey. A good practical agent has recently inspected the mine, and states that the improvement in depth is most marked, and that the resemblance of the lode in the 60 to that in Great Laxey is very striking. There has been spent on Great North Laxey Mine and plant about £15,000, and the present company have provided additional capital to the amount of £12,500, of which £6250 is called up, and about £5000 of it is still unexpended, leaving a reserve of £6250 if required; but it is believed that the present balance will be ample to make the mine pay. It appears, therefore, that the past expenditure and the present balance together are equal to nearly £3 per share on the 12,500 shares. About a year ago Great Laxey shares (also 12,500) were about £4, since which they have been £20, and now about £18, besides dividends paid. In the next 12 months it is fully expected Great North Laxey shares will also have a good rise."

Mr. James Crofts, 1, Finch-lane, London, E.C., can do business in the above shares.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON, E.C.

James Lane has FOR SALE at nett prices:—5 Basset and Grylls; 20 Bryntail, £2¼; 50 Crebor; 20 Carn Camborne, 25s.; 50 Dale, 10s. 6d.; 10 East Lovell, £13¾; 10 East Rosewarne, £3; 3 East Basset, £36; 20 East Russell, £4⅞; 20 East Wheal Vor, £2; 20 Frank Mills, £6½; 20 Great Wheal Busy, £1½; 10 Great Wheal Vor, £34¼; 50 Gothic, 37s. 6d.; 50 Great North Laxey, £3; 20 Hallenbeagle, £3¾; 20 Kelly Bray; 20 Lady Bertha, 12s. 6d.; 10 Maudlin; 25 North Treskerby, £2¼; 6 North Basset, 25s.; 50 North Devon, 32s. 6d.; 20 New Wheal Martha, £1¼; 25 New South Caradon, 5s.; 50 Pedn-an-drea, 7s. 6d.; 20 South Lovell, £2¾; 100 Vale of Towy; 100 Silver Mountain, 4s.; 25 Unity.

MR. WILLIAM LELEAN (Member of the Mining Exchange), has FOR SALE the FOLLOWING SHARES, at nett prices:—

10 Bedford United, £2⅜.	5 Gonamena, £2 18s. 9d.	50 Rosewarne Consols, 15s.
50 Bedol-Aur, 17s. 6d.	5 Great Fortune, £4¼.	25 St. Day United, 15s 9d.
5 Bryn Gwiog, £17½.	75 Great Retallack, 1s.	15 Sithney Metal, £2 11s 3d
25 Camborne Vean, 22s. 6d.	50 Great South Chiverton.	30 Snaefell, 17s. 6d.
5 Clifford Amal., £31¼.	10 Great Wheal Busy, 25s.	20 South Basset, £4 10s.
20 Chiverton, £6⅜.	50 Kelly Bray, 12s. 6d.	5 South Carn Brea, 10s.
5 Cook's Kitchen, £8⅞.	60 Lady Bertha, 8s. 9d.	25 So. Condurrow, 28s. 6d.
10 Chiverton Moor, £2 16 3	10 Maudlin.	20 South Darren, 38s.
30 Carn Camborne, 21s. 9d.	10 Marke Valley, £5 3s 9d	5 Stray Park, £12½.
25 Drake Walls, 12s. 9d.	20 Nth. Treskerby, £2½.	5 Tincroft, £15¼.
20 East Carn Brea, £6¼.	10 Nangiles, £16¼.	5 Trelawny, £19¼.
30 East Grenville, £3 6s 3d (call paid).	25 New Clifford, 25s.	5 Tresevean, £4¼.
25 East Laxey.	5 New Rosewarne, £5¾.	100 Vale of Towy, 3s. 9d.
25 East Snaefell, £2 2 6	10 NewWh. Martha, 21s 3d	3 West Chiverton, £65.
10 East Treskerby, £2.	20 No. Chiverton, 39s. 6d.	15 West Caradon, £7⅞.
60 East Providence, 15s.	25 North Downs, 11s.	50 West Wheal Jane, 4s.
10 East Russell, £4 8s. 9d.	100 North Minera, 2s. 3d.	25 Wheal Ludcott, 9s. 9d.
3 East Basset, £33.	100 North Robert, 10s.	25 Wheal Unity, 4s. 6d.
5 East Caradon, £13⅝.	5 North Roskear, £15½.	10 Wheal Uny, £2 3s. 9d.
10 East Lovell, £12⅞.	10 North Basset, 14s. 3d.	10 Wh. Mary Ann, £13¼.
25 East Rosewarne, £2½.	20 North Crofty, £1⅜.	5 Wheal Margaret, £7½.
50 Garlidna, 15s. 6d.	30 North Devon, 27s. 6d.	30 Wheal Crebor, 38s. 6d.
15 Great Laxey, £18.	10 Pendeen, £2.	15 Wheal Edward, 5s.
5 Great Vor, £33⅜.	100 Prince of Wales, 2s. 6d.	30 Wh. Grenville, £2 16 3
10 Gt. So. Tolgus, 46s. 6d.	3 Providence, £33.	20 Wheal Grylls, £2.
50 Great North Laxey.	5 Rosewall Hill, 35s.	50 Wheal Hope, 10s.
50 Great North Laxey.	100 Redmoor, 3s.	Wheal Harriett, 5s. 6d.

Mr. Lelean BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER. Parties may rely upon him for sound advice and punctuality in all his engagements.

My Presentation Almanack may be had on application.

N.B.—SPECIALLY RECOMMENDED, the immediate purchase of Maudlin shares. I annex the following from the *Mining Journal* of Feb. 4:—

Maudlin Mines.—The rich discoveries still continue, and are of the most satisfactory character for the evidences they afford of the great extent of the rich lode of copper ore they discovered seven or eight weeks since. They have not only again cut into this ore in driving the 70 east, after having been interrupted by the goosan, but they have come upon it in cutting in south from the same level west, where it is running back behind the level towards the greenstone. Hence it would appear that the shaft now being sunk is going down right into an immense deposit of unusually rich copper ore, which may be met with at any moment, and which must, when reached, greatly enhance the value of the shares.

Bankers: Messrs. Robarts, Lubbock, and Co.

Offices, 11, Royal Exchange, London, E.C.

MR. G. D. SANDY, SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C. (Member of the Mining Exchange), has SPECIAL BUSINESS in the following shares:—

Bedol-Aur.	Great South Tolgus.	Redmoor.
Bottle Hill.	Great Vor.	Stray Park.
Bryntail.	Great South Chiverton.	Sithney Metal.
Camborne Vean.	Hallenbeagle.	Sortridge Consols.
Carn Camborne.	Hingston Down.	St. Ives Wheal Allen.
Crane.	Kelly Bray.	So. Caradon Hooper.
Drake Walls.	Lady Bertha.	Tremayne.
East Chiverton.	Marke Valley.	Tolvadden.
East Laxey.	New South Caradon.	St. Day United.
East Rosewarne.	North Chiverton.	Wheal Grylls.
East Lovell.	North Devon.	Wheal Harriett.
East Russell.	North Shepherds.	Wheal Hartley.
East Vor.	North Treskerby.	Wheal Unity.
Great Retallack.	Illogan Consols.	Wheal Crebor.
	Prince of Wales.	

A selected list of shares certain to have a considerable rise during the present year forwarded on application.

Current Daily Price List as usual.

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodsfoot, South Caradon, Devon Great Consols, Great Wheal Vor, Wentworth Consols, and Sithney Wheal Metal for investment. These shares will pay good interest for money at present quotations.

Advertisements have recently been inserted in the columns of the Mining Journal by dealers who, having sold shares for forward delivery, endeavour to frighten timid holders in order to possess themselves of their shares to fulfil their contracts; this system has been adopted particularly against Great Wheal Vor, West Chiverton, and Chiverton shares, and I caution my friends against parting with their property, or giving credence to the unfounded assertions of interested parties.—76, Old Broad-street, London, E.C.

MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 17 years), has FOR SALE at nett prices:—100 Frontino and Bolivia (15s. paid), 26s. 6d.; 20 Quebrada (free), £5¾; 1 Minera (ex. div.), £293¾; 100 Okel Tor, 23s. 9d.; 100 Santa Barbara, 12s. 6d.; 25 East Russell, £4¼; 75 Don Pedro, 11s. 6d.; 100 Welsh Gold, 16s. 3d.; 5 Tincroft, £15½; 60 East Rosewarne, £2 4s.; 15 Frank Mills, £6¾; 1 West Tolgus, £63; 100 Wheal Unity, 6s.; 100 Anglo-Brazilian, 6s.; 25 Great South Tolgus; 100 Bottle Hill, 5s.; 25 North Pool, 20s.; 50 Kelly Bray, 11s. 9d.; 10 East Lovell, £13; 5 Great Vor, £34; 30 East Grenville; 80 Vallanzasca; 200 East Seton, 6s.; 50 Great North Laxey, £3; 20 Maudlin, £6¼; 50 South Grenville, 8s.; 120 Prince of Wales; 1 West Sharp Tor; 135 Wheal Hartley; 50 West Maria and Fortescue; 12 Great Devon and Bedford, £3⅜; 50 North Treskerby; 125 Merilyn, 3s. 6d.; 75 Great South Chiverton, 14s.; 200 Illogan Consols, 7s. 6d.; 5 Billins; 50 Tolvadden; 20 Cape Copper; 100 Gawton: 20 Bryn-lloyd, £4⅝.

GREAT NORTH LAXEY (LIMITED).—Mr. PETER WATSON strongly recommends the purchase of shares in this mine at the present low price of £3 to £3¼, as from information he possesses he has every reason to believe the shares will greatly advance in price, and the mine become highly profitable.

N.B.—During the week the mine has improved.

79, Old Broad-street, London, E.C., February 10, 1865.

GREAT NORTH LAXEY (LIMITED).
From Mr. Peter Watson's "Weekly Mining Circular and Share List."

To Subscribers and Clients.—The inactivity and depression so generally prevalent throughout all departments of commerce are still observable in the Mining Share Market.

The advance in the price of foreign tin is very properly regarded as a healthy feature, but there can be no question that until there is a revival of animation in other descriptions of securities mining will not be aroused from its present state of stagnation.

As I have upon several former occasions mentioned, it is now, before the upward reaction sets in, that the investing public should make their selection of mining stock, and for the very obvious reason that while it is hardly within the range of possibility—certainly not of probability—that the market value of the best description of mine shares can be much further depressed, it may be safely opined that the time is not far distant when we shall see a great and rapid advance.

For the reason stated in last week's Circular—namely, that the price of lead has been steadily maintained, the public are naturally enough now giving their attention more particularly to those mines which produce that mineral; and among those of a progressive character none continues to absorb so large a share of attention as Great North Laxey (Limited), which, I am glad to be in a position to state, according to a letter just received from Capt. Rowe (the manager of Great Laxey and Great North Laxey), has considerably improved within the past few days at two of the most important points of operation—namely, in the shaft, and in the adit level, driving towards the Great Laxey Mine.

To have the accredited testimony of such an authority as Capt. Rowe, by whose practical skill and ability Great Laxey has been brought to its present eminent condition of prosperity, that Great North Laxey now presents indications and prospects equal to those of Great Laxey before its extensive resources were fully developed, cannot fail to be more than encouraging to the shareholders of Great North Laxey, especially when they recollect that it is but a few months since Great Laxey shares, in the same number as Great North Laxey (12,500) were selling in the market at about £4 per share, and have since reached £22, being now from £18 to £19 per share.

I may also add upon the authority of Capt. Rowe, that in each successive stage of the development of Great North Laxey, the character of the ground, the matrix in which the ore is found, as well as its several component parts, have been precisely identical with those of Great Laxey. This is a feature, the importance of which cannot be overestimated, while at the same time it unequivocally verifies the strongly-expressed opinions of every practical authority who has inspected the mine—that upon further opening up Great North Laxey will equal its rich neighbour, Great Laxey.

It should be further remembered by those who have purchased, or propose purchasing, Great North Laxey shares, that it is altogether a different thing to taking an interest in a mine undeveloped, and where great expense has to be incurred by providing machinery and plant, and of sinking shafts and driving levels, which not only create an enormous outlay, but in many cases occupy so long a time as to completely exhaust the patience (and the pockets) of the most persevering shareholders.

In the case of the Great North Laxey the whole of this outlay has been incurred, for the mine is provided with efficient machinery, of sufficient power to develope the most ample resources, the shaft has been sunk and levels driven, lode opened out which improves in value every fathom it is explored. So that the only expense *to be incurred* is for actual labour in the further development of the mine, and (which is more important than all) to meet this expenditure there is in the hands of the bankers a balance computed to be amply sufficient to bring the property into a dividend-paying condition.

It is for these very cogent reasons that I have and still do strongly recommend my friends and the public to at once buy Great North Laxey shares, while they can be obtained at £3 to £3 10s. per share. I understand that a large quantity of shares have changed hands at £4 per share.

ANNUAL REVIEW OF CORNISH AND DEVON MINES FOR 1864.

Devon Great Consols.	West Wheal Basset.	South Wheal Frances.
Tincroft.	Great South Tolgus.	Lady Bertha.
Providence.	East Caradon.	Wheal Trelawny.
East Providence.	Clifford Amalgamated.	West Caradon.
North Roskear.	East Wheal Basset.	Bedford United.
Roskearnoweth.	Great Wheal Vor.	North Treskerby.
Wheal Seton.	East Wheal Vor.	New Wheal Seton.
Cook's Kitchen.	South Caradon.	West Wheal Seton.
Wheal Basset.	Illogan Mines.	St. Ives Consols.
East Carn Brea.	Leawood.	Marke Valley.
East Wheal Russell.	Wheal Tremayne.	

WEEKLY MINING CIRCULAR AND SHARE LIST:
SYNOPSIS OF CORNISH AND DEVON MINES, &c.
Published by PETER WATSON.

The "Weekly Circular," No. 354, Vol. VI. (of the 30th December last), also No. 355 (6th January, 1865), No. 356 (13th January), No. 357 (20th January), and No. 358 (of Friday, the 27th of January), contains a Review of the above Mines, giving Sales of Ores, Profit or Loss, &c., and their General Prospects, with advice as to Purchase or Sale of Shares, &c. In this Review a List of the Tin and Copper Mines is given that have ceased, or temporarily ceased, to pay dividends. Also a List of the present Copper and Tin Dividend Mines, &c., with other important information; Statistics of Mines, Metals, &c., and the Mining Market.

N.B.—The Review will be continued on several other mines in the next three or four "Weekly Circulars."

79, Old Broad-street, London, E.C.

STOCK AND SHAREDEALER.—Mr. PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 79, OLD BROAD-STREET, LONDON, E.C.
Twenty years' experience.
(Two in Cornwall and Eighteen in London.)
Bankers: The Union Bank of London, and the Alliance Bank.

Every information can be obtained on personal application, or by letter, as to purchases and sales of Mine, Railway, Bank, and other Shares and Stoks, and the best investment for capital.

From the close proximity of his offices to the Stock Exchange, as well as the Mining Exchange, Peter Watson is enabled to act with promptitude on all orders entrusted to him, which at all times are carried out with punctuality.

MR. HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

50 Anglo-Brazilian, 5s. 3d.	20 Great Devon & Bedford.	50 Santa Barbara.
100 Bedol-Aur.	20 Great North Downs.	20 South Condurrow.
5 Bryn Gwiog, £15.	30 Grylls Florence.	35 St. Day United, 14s.
20 Crane.	20 Gawton.	5 St. John d. Key.
20 Carn Camborne, 22s.	50 Gt. South Chiverton.	30 St. Just United (an offer wanted.)
10 Clifford Amal., £31¼.	20 Hallenbeagle, £3¼.	20 South Darren, 39s.
5 Cobre.	1 Herodsfoot, £35¾.	20 Snaefell.
10 Chiverton, £6 2s. 6d.	10 Hingston Down.	1 Sou. Tolgus, £25 18s. 9d.
20 Camborne Vean, 24s.	5 Kitty, £5.	10 Sithney Metal, £2¾.
5 Clijah & Went., 37s. 6d.	20 Kelly Bray, 12s.	20 So. Wh. Leisure.
20 Crowan Consols (offer wanted).	40 Mariquita, 15s.	25 South Lovell, £3 1s. 9d.
10 Cape Copper, £11⅛.	30 Montes Aureos, 20s. 6d.	10 Tincroft.
5 Cwm Erfin, £41.	20 Mineral Bottom, £5¼.	1 Trelawny, £19¼.
20 Drake Walls, 11s. 6d.	10 Maudlin.	10 Tresavean, £5¼.
100 Don Pedro.	50 New Birch and Vitifer, £1 17s.	50 Treweatha, 1s.
1 East Basset, £33.	20 North Basset, 20s.	20 United Mex., £5 1s. 3d.
5 East Carn Brea, £6 6s.	10 North Pool, 24s. 6d.	20 Vale of Towy, 2s. 6d.
10 East Russell, £4 10s.	50 North Devon.	1 West Chiverton, £64¾.
10 East Lovell, £12 18s. 3d.	5 No. Wh. Crofty, £2¼.	20 Wheal Grylls, £1 18s 9d
10 E. Rosewarne, £2 5s. 3d.	5 New Rosewarne, £7.	1 Wheal Seton, £198.
20 East Vor, £1 17s.	10 New Clifford, 25s.	5 West Caradon, £7. 8s 9d.
20 East Grenville, £3 4s 9d.	20 North Jane, 16s. 9d.	1 West Seton, £202¼.
20 East Laxey.	1 North Roskear, £16¾.	1 West Tolgus, £61.
5 East Caradon, £13⅛.	10 North Treskerby.	1 West Sharp Tor.
10 East Grylls.	20 North Chiverton, 41s 9d	20 West Vor, 22s.
30 East Abraham.	5 New Wendron.	20 Wh. Grenville, £2 16 3.
10 Frank Mills, £6 8s. 9d.	50 New East Birch Tor.	20 Worthing, 14s. 9d.
100 Frontino and Bolivia.	1 Nangiles, £15 18s. 9d.	30 Wheal Crebor, 38s.
50 Great Grylls, 5s.	50 Okel Tor.	20 Wh. Ida (offer wanted).
10 Gt. So. Tolgus, £2 7s 6d.	40 Pedn-an-drea, 7s. 6d.	5 Wentworth, £8¼.
100 Gt. Northern Copper, 1s. (call paid).	1 Providence, £32½.	1 Wheal Rose, £31½.
30 Great Caradon (an offer wanted).	10 Prosper United, £3 2s.	20 Wheal Agar, £2.
5 Great Wh Vor, £33⅜.	50 Port Phillip, £1⅜.	10 Wheal Curtis.
5 Great Laxey, £18.	20 Quebrada (free), £5 18 9	20 Wheal Uny.
	40 Redmoor, 3s.	50 Welsh Gold, 16s. 6d.
	20 Rosewarne United.	50 Yudanamutana.
	5 Stray Park.	

And is a BUYER of 5 West Chiverton, £63; 50 Hingston Down, £3 12s. 6d.; 10 Chiverton, £3; 40 Rosewarne United; 5 Nangiles; and 2 West Sharp Tor.

There are several dividend and progressive mines that are now selling at very depressed prices, the shares in which must shortly considerably advance. Mr. Herron will be happy to forward a carefully-selected list to parties wishing to invest.

Mr. Herron can strongly recommend, as an unusually safe investment, a certain railway and two joint-stock banks, and will forward particulars upon application.

2, Adam's-court, Old Broad-street, February 10, 1865.

MR. T. P. THOMAS, GENERAL SHAREBROKER, AND AUCTIONEER FOR THE SALE OF MINING, RAILWAY, AND OTHER SHARES, STOCKS, BONDS, DEBENTURES,
And all descriptions of Public Securities.
No. 6, NEW BROAD STREET, LONDON, E.C.
Shares bought and sold on the usual commission.
Terms for sale of shares by auction furnished on application.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 37, OLD BROAD STREET, LONDON, E.C.

Mr. Thomas has in course of preparation a pamphlet relating to mining investment and speculation at the present time, which will shortly be published, price 1s.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE, LONDON, E.C., has the following SHARES FOR SALE, free of commission:—

10 Bryn Gwiog, £17¼.	10 Frank Mills, £6 11s.	50 No. Treskerby, £2 6s 3d
10 Bottle Hill, 2s. 6d.	10 Great Laxey, £18.	50 Prince of Wales, 2s 9d.
25 Caradon Vale, 3s. 6d.	25 Gt. So. Tolgus, £2 8 9	50 Pedn-an-drea, 7s. 6d.
50 Carn Camborne, 24s.	10 Gt. Wh. Vor, £33 12 6	50 Quebrada, £3 10s.
50 Cefn Cilcen, 10s. 3d.	20 Grylls Wheal Florence, 20s.	25 South Darren, 40s. 6d.
5 Clifford, £31.	50 Great Devon & Redford (Colcharton), 35s.	20 South Condurrow, 28s.
15 Dale, 8s.	20 Hingston Down, £4.	50 St. Day United, 16s. 9d.
20 East Jane, 25s.	100 Llanberis Slate, 20s 3d	25 St. Just United, 19s 6d.
50 East Abraham, 10s.	50 Lady Bertha, 8s. 9d.	5 Stray Park. £12.
15 East Lovell, £12 18s 9d.	100 Llanberis Slate, 20s 3d	50 Vale of Towy, 3s. 6d.
20 East Caradon, £14.	20 Marke Valley, £5 2s 6d	50 West Wh. Vor, 23s.
50 East Grenville, £3 6s.	50 New Birch Tor, £2¼	40 Wheal Crebor, 39s. 6d.
20 E. Carn Brea, £6 8 9	50 N. Wh. Martha, 22s 9d.	40 Wheal Grenville, 56s 9d
30 East Russell, £4 13s 9d.	5 Nangiles, £17.	50 Wheal Harriett, 8s. 9d.
25 East Rosewarne, £2 6 3	10 New Rosewarne, £8.	35 Wheal Unity, 6s. 3d.
10 East Wh. Vor, 36s. 6d.	50 North Minera, 2s.	30 West Maria and Fortescue, 39s.
20 Frontino and Boilvia (Gold), 24s.	5 North Shepherds, £2¾	

Parties of respectability can have transfers registered into their names previous to payment. Bankers: London and County Bank.

Great North Laxey Mine.—Mr. F. G. Lane can give full particulars of this important mine. By the official report received this week, it will be seen that the mine improves, and that fresh discoveries are apparently about to be made in the adit driving towards Great Laxey. Mr. Lane can dispose of some shares at £3 nett, and will receive applications up to the 16th inst. inclusive, when he will allot them in the order received.

Established Twelve Years.

HENRY GOULD SHARP,
32, POULTRY, LONDON, E.C.,
BUYS and SELLS STOCKS and SHARES of EVERY marketable DESCRIPTION at the CLOSEST PRICES of the day, and offers his experience in selecting mines for safe and profitable investment.
Member of the Mining Exchange.—Bankers: London and Westminster.

PUBLIC NOTICE.

ADVERTISING SHARES AT FIXED PRICES.—HENRY GOULD SHARP begs to CAUTION his CLIENTS and the PUBLIC against this false, dishonest, wicked system. Certain parties appear to take it up by fits and starts. They are well aware they do not possess the shares so advertised. It is a trap to catch the country shareholders. It reminds one of "Cheap Jack" upon his stand, "touting" for business. It injures every shareholder's property, by trying to knock down the price of his shares. I may have occasion to mention names and circumstances in next week's Journal.—32, Poultry, London, E.C.

IMPORTANT PUBLIC NOTICE AND CAUTION.—HENRY GOULD SHARP begs to inform his friends, clients, and the public who invest capital in British mines that the only "legitimate way" of so doing is through the Members of the Mining Exchange, which is an establishment similar to the Stock Exchange, and governed by a similar code of rules. A very large business is transacted daily, but in British mine shares only. The list of British mines, and the quotations in the *Times*, emanate from the Stock Exchange; these quotations are often incorrect; they give much dissatisfaction, and cause great want of confidence. There is no market upon the Stock Exchange for shares in British Mines, although a great parade and show is frequently made in the *Times* under the head of "Railways, Mines, and other Shares." The dealers and jobbers in British mines upon the Stock Exchange (about twelve in number) are "compelled" to resort to the members of the Mining Exchange to transact all business entrusted to their care by the stock brokers. The public only pay double commission or profit in going to the Stock Exchange for British mining shares. Stock Exchange brokers know nothing of the merits or demerits of British mines.
32, Poultry, London, E.C.

JOHN R. PIKE has received instructions to SELL the undermentioned SHARES, at the prices quoted, FREE OF COMMISSION:—

100 Carn Camborne, £1 1 3	20 Gt. No. Downs, £2 2 6	20 North Basset.
9 Clifford Amalg., £31.	100 Great South Chiverton.	10 Prosper United, £3 5s.
75 Camborne Vean, £1 1 3	50 Hingston Down, £3 15 6	4 Providence, £33.
15 Cook's Kitchen, £8 17 6	70 Hallenbeagle, £3 2s. 6d.	25 Sithney Metal, £2 3 9
100 Bryntail.	50 Lady Bertha, 7s. 3d.	100 St. Day United, 15s. 6d.
2 East Basset, £33 5s.	20 Long Rake, £1 1s. 3d.	1 South Tolgus, £23.
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SPECIAL BUSINESS in the above. See report in last week's Journal.
February 10, 1865.

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Original Correspondence.

ON THE PROBABILITY OF EXTENDED WORKINGS IN THE NORTHERN COAL FIELDS.

Sir,—I am happy to see that this subject has been taken up by "M. E." in last week's Journal; I am sorry, however, that he does not clearly understand what I said on the matter. He states that it is a generally-received opinion that the Busty seam is composed of the Stone coal and Five-quarter seams of Blaydon Main Colliery, and also that it has never before been disputed that the Five-quarter and Six-quarter seams of the Team Colliery composed the Busty seam. That these opinions are both fallacies I can soon show. The Six and Five-quarter seams of Sheriff Hill and and Team Collieries, the latter lying about 5 fathoms above the Low Main or Hutton seam, form the Low Main seam on the Wear; and the Low Main or Hutton seam of Team and Sheriff Hill is identical with the Main coal seam of Marley Hill (this can be traced from one colliery to another); in this case how can seams lying above the Low Main compose another seam lying forty fathoms below it? The case of the Stone coal and Five-quarter seams is exactly similar, but it would be merely a repetition of my former letter, to show here that no relation whatever can exist between these seams and the Busty seam of Derwent Collieries.

I know that it is the opinion of many of the cleverest practical miners and mining engineers of the district that the Stone coal and Five-quarter seams form the Busty seam. Amongst others I may mention the name of Mr. T. Y. Hall; but, with all deference to their opinion, I beg to say that the seams in question occupy a very different position in the coal series from that usually assigned to them. As yet I do not think that sufficient attention has been paid to these matters, though they are of the greatest importance to the mining engineer or mine adventurer, as a thorough knowledge of them would often be the means of obviating those expensive mistakes into which those parties sometimes fall.

After hearing further from "M. E." on this subject I will, with your permission, give a more detailed account of the seams and coal strata in the Tyne and Derwent coal district. Thomas Robson.

Newcastle, Feb. 9.

ON THE PROBABILITY OF EXTENDED WORKINGS IN THE NORTHERN COAL FIELDS.

Sir,—It has been acknowledged for some years that good workable seams may exist below the Low Main, but this has existed in the minds of people more like a dim, hazy sort of belief rather than a firm conviction. However, I may remark, by the way, that a little to the west of the point started from by Mr. Robson, but on the south side of the River Tyne, at the pumping-shaft of the old Gateshead Park Colliery, a bore-hole was put down some years ago, and a seam found, believed to be that known as the Beaumont at Blaydon. This seam is supposed to be good coal, is about 3 ft. in thickness, and 26 fathoms below the Low Main. But, in order to prove it a good seam or otherwise, a sinking or boring is certainly required somewhere in the lower parts of the basin, at least 100 fathoms below the present main seam.

To return to the section of Mr. Robson. It looks well upon paper, but I scarcely think he seriously means to tell us that on reaching Whickham the various seams can be traced as delineated by him, as it is well known that a very labyrinth of dykes exist at and around that unfortunate locality, so far as the state of the strata is concerned. However, I do not mean to assert that the riddle there presented cannot be solved, but it certainly has not been previous to his attempt. I must also object to the section given of Marley Hill. It is certainly not sufficiently accurate; at any rate, it differs materially from the one I possess of the same locality. Mr. Robson says in his letter—"'The only coal met with at Marley Hill, between the main coal and the Busty seam, being a thin seam of about 18 in., lying at 11 or 12 fathoms below the Main coal, which, it will be easily seen, is identical with the Stone coal or Low Main of Whickham."

Now, this is quite a mistake, as there are several coals between the Main coal and Busty seam, one of them about 2 feet in thickness, and there are also several *below* the Busty; so that the question arises, which of these coals (between the Main coal and Busty) represent the Stone coal or Low Main of Whickham? Perhaps Mr. Robson can give some explanation, or throw more light on this subject. I do not mean to dispute the main position assumed, that the Busty seam is below the Low Main in the series, but I certainly have, in common with many others, very grave doubts on the subject, and if these can be removed by sound and substantial reasons I, for one, shall be very glad.

As I have remarked above, the section given of Marley Hill is certainly not satisfactory, for, besides the inaccuracy I have pointed out, it does not appear to be in a proper position with respect to the Whickham section—that is, the surface, as shown at Marley Hill, ought to be placed considerably higher. The depths there are also incorrect. M. E.

Newcastle, Feb. 9.

THE RESOURCES OF MOTIVE-POWER OF CORNWALL AND DEVON.

Sir,—Feeling assured that you are always ready to give publicity to every communication that may have a tendency to assist mining, I offer a few remarks on what is unquestionably an important subject connected therewith. Having paid some attention to the prosperity of mining generally, and to that in Cornwall and Devon in particular, I have been forcibly struck with the importance of the real need of paying the greatest attention to every subject that holds out a fair chance of making any financial improvement therein. There is no doubt much can and, it is to be hoped, much will be done ere long towards the reduction of the cost of working all our mines in various ways. No improvement, however, from the reduction of miners' wages should ever be looked for. Whatever improvements are made in the reduction of expenses must come from other quarters. I intend to confine my present remarks to one particular subject, which, if paid proper attention to by Cornish and Devon mine adventurers, is calculated to effect a vast reduction in the expenses of a large number of our mines in both counties. The subject is the application of the enormous and inexhaustible resources of mechanical power lying dormant in our Devonshire and Cornish rivers, and its availability for driving all kinds of machinery. It is true that water-power is made use of in some mines at present, but, on account of many of them not being in close proximity to rivers, the localities affording facilities for its application are comparatively few. The motive-power, therefore, that is generally made use of in Cornish and Devon mines is steam, the effective properties of which are beyond dispute. The pumping-engines are, also, unsurpassed in point of perfection, and the quantity of water lifted a given distance for every 112 lbs. of ordinary coals consumed is really astonishing. Notwithstanding the great perfection of steam-consuming engines, the annual cost of coals to generate the needful quantity of steam used in the mines of both counties is very great, and in many mines the coal bills form a very large portion of the cost.

The object of this communication is to show that much may be done towards the permanent reduction of the cost of procuring suitable motive-power for a large portion of these engines, and thereby cut off a large portion of the crippling cost now incurred in procuring the needful units of power from coals by extracting the required power from a more economical quarter. That distance in the transmission of the elements of motive-power (properly speaking) in point of practice is no object, is already abundantly proved, by the fact that such elements are transmitted from the bottoms of the Scotch, English, and Welsh mines, a distance in the two former cases of several miles; the question being that of the best mode and the cost of transmitting a certain number of units from one point to another.

That the Devon and Cornish rivers contain immense motive-power anyone may satisfy himself of by investigating the subject. Of this there is no doubt, that the dormant power now lying in these rivers far exceeds that extracted from all the coals consumed by steam-engines in the said counties, and that it is practicable to obtain from these rivers ample power suitable to all the desired purposes and requirements of our steam and other engines, at a far less cost than is now incurred in the purchase of the needful elements of motive-power from coals. Indeed, there are very sound reasons to conclude that a mere tithe of the amounts paid for coals would purchase an equivalent number of units of motive-power from the waterfalls now lying dormant, which would be equally efficient and, perhaps, less dangerous than steam-power. The simple fact of any waterfall being at a considerable distance from the point where its power would be wanted to be applied would be no impediment as to its mechanical application. That is as regards the transmission of the medium of such power, it being purely a question of pounds, shillings, and pence only.

Various are the methods that might be made use of to extract from the rivers their power, and to deliver the same where wanted, but as a general rule there cannot be much doubt the best method would be to fix air-compressing machines along the falls of the rivers, and convey away the compressed air in suitable pipes to the places where wanted. The compressed air would be in proper form to apply directly to the engines now driven by steam without any further qualifications. As to the engines, a large portion of them would require little or no alteration. Condensing engines would dispense with their condensing gear. To fully bring these immensely valuable stores of power, described above, into use it would, no doubt, be highly needful to have an Act of Parliament, giving power to lay down pipes over such districts as would not afford the privilege without it. Much, however, could be done in many districts by private arrangements with the owners of the property that might be required; for, as a rule, land owners in general like to make the most of their property, and if they could be shown that the bare allowing a simple pipe of small size to be laid down across a portion of their waste land could be turned to a source of profit to them there, would be little fear of their giving the needful accommodation. And when the owners of the portions of rivers intended to be turned to account were informed that they could have a handsome revenue out of their hitherto dormant, but nevertheless, valuable waterfalls, it would be a rare case if either should not be prepared to have such permanently additional value secured to his property.

Again, these counties are being so threaded with lines of railways, for the most part through mining districts, that great facilites are now, and will be, in the hands of railway companies to favour, and to make arrangements for the allowing conducting-pipes to be laid down within the limits of their respective lines along by the side of the rails, at safe distance from them, so that the districts which are rich in stores of motive-power may be opened up for the great benefit of all, and the everlasting storehouses of Devon be let loose over the three southern counties, if required, with perfect ease as far as mechanical difficulties are concerned.

That the railway companies would be glad to favour such an enterprise for a consideration to assist their receipts is but reasonable to infer. Intervening waste lands between mining districts and neighbouring waterfalls in a great number of instances leave but very slender obstacles in the way of bringing the waste power of the latter to bear on the former. There is little doubt that much might be done without even an Act of Parliament. That it is perfectly practicable to extract the power from our waterfalls, and apply it to the uses of our mines, whatever the distances may be that intervene between the falls and the mines, may be laid down as a great fact, and it is equally true that it can be done to a vast advantage to the mines and the land owners. If any engineer has any doubts about the practicability of such an undertaking, let him investigate the subject in all its bearings, and consider the immense outlays that are being made in the United Kingdom in the shape of laying down conducting pipes for the convenience of cities and towns, and let him consider that in carrying out the suggestions made above that to give a full supply of motive-power to a great many of our mining districts would be only a question of moderate outlay indeed for each district, whereas the outlays to accommodate the cities and towns are very heavy.

The collection of motive-power from the rivers in the neighbourhood of any considerable group of mines of fair standing, and the delivering to each mine therein the portion of power it needed, at so much per unit, would be one of the best and safest speculations that a company could embark in. As, however, only a tithe of the coal bills would be sufficient to pay such company a fair and certain interest on their outlay, the great bulk of the benefit must come to the mines. Suppose that any established mining district be taken to economise on—say the Caradon—which abounds within a circle of a few miles with splendid waterfalls, of such power that if that power were extracted and delivered at the mines by conducting pipes it would be more than enough to drive every engine in the whole district; so that not a single pound of coals, or cubic foot of steam, need be used therein. A small portion of the cost for coals to generate steam would pay ample interest to any company for making the outlay, and delivering compressed air in the mines in the whole district in sufficient quantities to meet all requirements. The result, then, would not only be increased dividends, but a great rise in the market value of the mining property of the district generally.

Numerous mines in the above and other districts that are now languishing out their leases between hope and despair might, if the owners would combine together to purchase the needful motive-power required for each district at home in their own counties, where it could be had for a tithe of the cost now paid for it, be made to pay regular dividends, and bear proportionate market values. I need scarcely remark that similar advantages, in the shape of neglected waterfalls, are to be found very extensively throughout the United Kingdom.—*Wenford, near Bodmin.* G. Rickard.

MOTIVE POWER FOR MINES—THE WIND-ENGINE.

Sir,—It has often occurred to me that the cost of obtaining motive power for the surface operations at mines might be much lessened by the introduction of some cheap form of wind-engine—self regulating, not liable to get out of repair, and easily fixed. I do not see why the whole of the stamping and machine dressing might not be done with wind, if an engine, costing not more than 6*l.* or 8*l.*, could be devised. From the very nature of the power, it could be so arranged that it would be immaterial if each engine worked (say) only four heads of stamps, or half-a-dozen buddles, and the whole of the water power, where there is any, would thus be applicable to pumping and drawing. Where there is no water power the advantage would be still more obvious, as the importance of saving fuel is even greater than that of saving water.

Should any of the readers of the Journal be in a position to introduce such an engine as I allude to, I feel convinced they would find those ready to adopt it in almost every mining district, and the economy effected would, in a great measure, compensate for the low prices for metalliferous ores now ruling.—*Helvellyn, Feb.* 4. A. Thomas.

PROBABLE REVOLUTION IN STEAM—W. H. JAMES'S COMPRESSED AIR-ENGINE.

Sir,—In answer to "J. H.," your Redruth correspondent, I beg to inform that gentleman that the experiments made with my little compressed air-engine, more than six months ago, were of the very rudest kind, and instituted merely to prove the correctness of the principle upon which the invention was founded. The cylinders being formed of two old cast-iron pipes, bored in a small foot-lathe, and bolted to one end of a frame made of common deal planks, upon which some thin plate-iron was screwed; each cylinder being only of 2 inches diameter, with a stroke, inclusive of the exit passages, of about 13 inches. The cranks, crank-shaft, and fly-wheel of 4 feet diameter and 2¾ cwts., running in bearings fixed at the other end of the frame (these particulars were accidentally omitted in the description ot the engine as given in the Journal of Jan. 14). The springing of this frame during the action of the engine, while running at the rate of 400 revolutions per minute, was truly frightful, amounting from 1 to 1½ inches vibration between the cylinders and cranks at every revolution; so that, notwithstanding all ordinary stays to keep it in its place were employed, it required the strength of all the men in the shop to prevent its becoming a locomotive, causing, of course, an amount of friction upon the pistons and connecting-rods that could not be estimated, but must have materially lessened the effect. In the paragraph in the Journal it should also have been mentioned, as showing the superiority of this engine over the ordinary high-pressure steam-engine, that a well-finished engine of the latter class, of 6-in. diameter and 10-in. stroke, was placed alongside the compressed air-engine, so that the steam from the boiler could be turned from one to the other: from which steam-engine, although its action was much admired, and that it showed considerable economy in fuel, with all the fire we could possibly employ we could never obtain more than two-horse power, and scarcely that for a continuance; but upon applying the same quantity of steam to our little imperfect air-engine, it showed by the dynometer 5¼-horse power. It so happened, however, from thus over-firing the boiler in these experiments, and its getting red-hot, that a considerable leak was produced in the upper half of it; being anxious, however, to show it in operation to a gentleman, previous to its removal to other premises, without waiting to repair the leak, we separated and took away the upper half altogether, and then connecting the air-engine to the lower portion, almost to my own surprise, it worked the engine as before, producing 400 revolutions per minute, showing upwards of three-horse power, as stated in the former Journal, with not more than one-third the quantity of fuel; and so small a quantity of steam did it take to supply the engine, that a large portion of it was blowing off at the safety-valve during the whole time it was working, and was scarcely visible during its escape up the exit passages. I perfectly agree with "J. H." that when the force now lost during the exit of the air and steam is utilised, as it is intended to be in the next engine constructed, and the friction lessened by its being fixed upon a strong cast-iron frame, that a still greater economy of fuel will be the result. Unfortunately, however, the invention remains as before in a state of abeyance, after six months' loss of time, from causes that would be uninteresting for your readers to be made acquainted with, and having nothing to do with the invention itself. W. H. James.

844, *Old Kent-road, London.*

THE BESSEMER PROCESS.

Sir,—In last week's Journal you have inserted a notice headed "Profitable Patents." As this notice involves some inaccuracies, allow me to correct them. It is stated that "when the stamp duty of 50*l.* became due at the end of the third year of my patent, the friends who were then supplying me with funds to assist in the enormous expense I was incurring in perfecting my invention failed to see the importance of the discovery, and the 50*l.* stamp duty was not forthcoming." Now, I beg leave to state that I never received one shilling's worth of aid from any person towards perfecting my invention. What I did was at my own expense, until the invention was fully completed; and, as regards the stamp duty of 50*l.*, the non-payment of the amount was carefully concealed from me until the List of Patents become void through non-payment of duty revealed the fact to me. I had trusted my patent to eminent men, who promised that they would carry it through, and prevent its being tampered with. How they fulfilled their pledge is now sufficiently apparent.

Not only is my process the sole cause of the success of the Bessemer process, but the royalties are so rapidly increasing that at least one million sterling will come into Mr. Bessemer's hands before his patent expires. I do not grudge Mr. Bessemer his wealth, for he has worked with energy and perseverance, and it was no fault of his that my patent was lost; but he ought to acknowledge his obligations to me in a manly, straightforward manner, and this would stamp him as a great man, as well as a great inventor.—*Cheltenham, Feb.* 6. Robert Mushet.

THE PATENT LAWS—THE CROWN v. INVENTORS.

Sir,—The correctness of the views expressed in my letter in last week's Journal, as to the probable jubilant effect of the Judgment in "Feather *v.* the Queen" on the anti-patent law party, were immediately verified by the appearance in the *Times* of Saturday last of a leading article of trenchant character, in which it is said that the result of this case has given the "*coup de grace* to the Patent Laws." For myself, although entertaining in general the highest respect for the ability and character of the "leading journal of Europe," I confess to being, notwithstanding its argumentation, unable to perceive that the sentiments of late years expressed on the subject of the Patent Laws are based upon truth, upon justice, upon real expediency, or upon common sense. For it is not true that the results of mental labour are less worthy of being the subject of special properties, to be held by those who thus labour, than the results of hand labour, which are without scruple appointed to be held by those who have exercised that kind of labour; although even this seems to be now questioned, since the judges in the Exchequer Chamber Appeal Court have within the last few days virtually decided that those roughriders over proprietary rights, the railway companies, may with impunity block up the access to a man's shop, warehouse, or factory, and injure or destroy his property in the labours of years. *Vide* cases of Ricket *v.* Metropolitan Railway Company, and Cameron *v.* Charing Cross Railway Company, as reported in the *Times*, and other public journals. *All for the public good, no doubt*, as your correspondent, Mr. G. Shepherd, once wrote in the *Mining Journal—i.e.*, private injury, without compensation. Nor is it true that there is any real difference between mental labour, expressed in the form of a new book, or original literary work, of a statue, a picture, or a new pattern or ornamental article, which are the subjects of copyright, and mental labour expressed and developed in the form of a new machine, or a new method or process, which are the subjects of patent right. And it is certainly not just that one of these forms of labour should have a benefit accorded to it which is denied to others. Neither is is really expedient to deny to the inventor, by whose aid all the wonderful material progress of the present age has been achieved, his reward and remuneration; if such progress be worth encouraging, which everybody seems to think it is. Certainly it is not common sense to suppose that inventors will work for nothing, or that they can live upon air.

That there are many and grave objections to our Patent Laws as they now exist I am not the one to deny, and that some of these objections regard matters injurious to manufacturers and the public at large I am ready to admit, but when Hercules cleansed the Augean stable he did not knock the building down, he simply removed its filth—an apposite lesson for Hercules of Printing-house-square. F. W. Campin.

Temple, Feb. 7.

GRANITE FOR PUBLIC BUILDINGS.

Sir,—All who desire to see something like architectural embellishment in this metropolis will be glad to hear that the suggestion of more extensively using granite for our public buildings is cordially approved among those who have the power to give it effect. If I am not much mistaken, the pink and red varieties, from the quarries of the Scottish Granite Company, in the Isle of Mull, will shortly be conspicuous in the City. But what is contended for is, that great structures should be completely of this most beautiful and durable material. They would then be an object of pride to the citizens, and of admiration to foreigners. Indeed, they would be unique, for where, in Europe, do you find granite buildings, public or private? Besides the Globe Insurance office, at the angle of Cornhill and Lombard-street, the General is about to re-erect its premises in King William-street, and the Queen has secured the commanding position in Cornhill, near the London Tavern and Leadenhall-street. Here are opportunities of combining true magnificence with real economy; and I am happy to believe that they are not likely to be lost. As stated in my last letter, the chief obstacle to the more extensive use of granite is not the original cost of the stone itself, but its freight. But this and other incidental obstacles may easily be overcome, and that architect will be raising an enduring monument to himself who first recognises its inherent value, and urges its use in all public buildings. With the best Welsh slates for the roof, sound timber, and granite walls, our public erections may truly bid defiance to decay, and the expense of repairs from damp, dry-rot, and the other ills to which all are more or less exposed, will be reduced to *nil* for many, many years.—*Feb.* 9. Civis.

CARELESSNESS IN COLLIERY WORKING.

Sir,—The accident at the Princess Royal Colliery should cause all the coalmasters in the Forest of Dean to pay more attention to the quality of, at least, that portion of their plant upon which the safety of their workmen depends; for there can be no doubt that the owner will be put to far greater expense by the law proceedings that will be carried on against him than he would have been by purchasing a dozen new ropes. Is it not shameful that the only rope on the pit should be so short, that had it been passed over the wheel in the pit-framing it would not have reached the bottom of the pit at all, and allowed the men to have a fair hold to slack it out? As it was, the poor fellow that was killed was swung down by a loose rope running over a pole, and the rope so rotten that Mr. Brough, the Government Inspector, pointed out more than a dozen bad and fussy places in it. How he reached the bottom safely is astonishing to me, and the least that could be expected was that the dragging of the rotten rope in so careless a manner would break it before the man could be got to the top of the pit. The poor fellow fell nearly 50 yds., being little more than 10 yards from the top when the rope broke, and was left there for an hour and a half, being frightfully mangled and quite dead when they got him up.

Here the failure to expend a few pounds, to keep the boiler from bursting and buy a good rope, has sacrificed a man in his prime of life, and left a widow and three children unprovided for. Surely, then, something should be done to make colliery proprietors liable for such accidents, if they can be so called. Mr. Brough has stated that he will lay the present case before the Home Secretary, that a Crown prosecution may be commenced; and I hope that every means will be taken to learn whether it is true, as stated, that the rope was purchased of a marine store dealer, who bought it with the old plant of an adjoining colliery some months ago, and has left it rotting ever since. M. S.

Bream's Eaves, Feb. 7.

PETROLEUM AS STEAM FUEL.

Sir,—I have been anxiously expecting that the statement of Mr. W. H. James's experience in connection with the use of liquid fuel would have been followed by some statement from Mr. Richardson as to whether his trials confirmed Mr. James's opinion or otherwise; for it would be very interesting to have a detailed statement of the manner in which he has proceeded, and the results obtained, as it would enable us to see to what purpose the use of petroleum as steam fuel could be applied, as there are so many instances other than marine purposes where motive-power is wanted, that I do not all despair of any invention being made valuable to its owner.

The condemnation of petroleum as a substitute for coal where a continuous power is required I quite agree with; it would always be so costly that it must be impracticable. But the question which occurs to me is this—would it not be a very desirable fuel in such cases as where steam is required (say) only an hour daily, or for three or four hours weekly? Not long since you referred to a gas-engine, invented, I think, by Lenoir, and remarked that, although gas as a fuel for steam purposes generally could not be applied, the Lenoir engine could be economically and successfully employed in innumerable cases,

because ores on at the work ceased the cost ceased also. Would it not be much the same with petroleum? It burns almost like gas, and would, therefore, get the engine in working order almost as rapidly, if it could be burnt in the same way. Whether it could or not I do not know, but we might at least be told how long would be required from the lighting of the fire to the starting of a three-horse engine, and the cost for which such an engine could be run for (say) two hours weekly; I mean the actual cost, as when the cost is stated "at the rate of" no practical opinion whatever can be formed, because it sometimes happens that, in practice, an invention can never be used under its best (theoretical) conditions.—*Crieff, February 6.* J. C. H.

SLATE QUARRIES AS AN INVESTMENT.

SIR,—Your able correspondent in Carnarvonshire, in a series of articles on Slate Quarries as an Investment, has shown in a concise manner how any intelligent person may satisfy himself that a quarry contains the elements of success. It is very desirable, for the use of persons seeking safe employment for their capital in quarries, that these letters should be published. Could some ready means be found of making the profits of this class of investment more generally known it would create confidence in those persons desirous of a good investment, and they would no longer deposit their money in banks at 4 per cent., when, by a judicious selection, the same laid out in a good quarry would realise from 30 to 40 per cent. The profits from quarrying are so great as to exceed belief, and in a few years persons of moderate incomes have been raised by their quarries to the possession of princely fortunes. There is an ever-increasing demand for slate; and there are many quarries capable of much greater development, in which more capital would be well invested; and within the reach of every investor there is a means of selecting the *good* and avoiding the *bad*, either through some respectable agent, or by a letter from any slate merchant to his Welsh correspondent an independent report might be obtained; this should always be done to prevent future disappointment. A faithful report on a slate quarry is a matter of fact, as the extent of the vein can be clearly traced and accurately measured, and a very close approximation given of the outlay required to produce dividends. The most promising quarries here privately worked are the Crosier and the Rhosydd; in these it would be difficult to obtain an interest. The best worked by companies limited are the New Craig Ddu and the Maen Offerem; these shares are worth buying, and the quarries in a forward state, likely soon to become highly remunerative.—*Festiniog, Feb. 7.* CORRESPONDENT.

CORK MINING DISTRICT—No. III.

SIR,—If "A Mine Proprietor" will look into my letter, which appeared in the Journal of Jan. 21, he will see that I stated the ground to be a true killas, when a depth of from 60 to 80 fathoms was reached. With regard to the amount of capital, I named what I considered sufficient (4000*l.*) to sink the shaft after the engine was erected, say in all 7000*l.* This shaft should be sunk on the junction of the main lode with a caunter, which intersects it at about 180 fathoms to the east. This, according to the section which I prepared about three years since, would take the course of ore which dips east from the whim-shaft, at a depth of about 110 fathoms. This proposed shaft was commenced by Capt. Penrose, and sunk 30 feet, and he says in his report, "Judging from the present appearance of the two lodes at this point, that by continuing to sink upon them, and proving as you go down, copper ore will be found of sufficient value, not only to pay the cost of sinking, but also the whole cost of working the mine." An adit would take this shaft about 80 fathoms from grass, and is already driven 60 or 70 fathoms. The failure of mining in Cork is, probably, in great part due to the want of a spirit of speculation in the locality, and the dearth of good miners, who have often to be obtained from Cornwall. I do not dissent from the opinion of "A Mine Proprietor," that some part of the failure may be referred to the interference of quacks, but as to the inspectors, whether incompetent or not, they have nearly all expressed themselves favourably of the properties on which they have had to report.

I do not say there are not many as good speculations as Browhead between there and Cappagh, but I know of none opened which present such good prospects. "A Mine Proprietor" wishes to know the result of the working of the mine on tribute by Capt. Penrose. Here is what he says of it in his report on June, 1864:—"In conclusion, it is worthy of note that the last two months the mine was worked it was done on tribute, the tributers paying the whole expenses of the mine. The yield of ore in that time was over 20 tons, which was sold at Swansea for 10*l.* 4*s.* per ton. The mine was kept dry by hand-pumps to the 63, the water being easy." I have named 7000*l.* as sufficient to put the Browhead to the 110, where it will meet the course of ore already proved at the whim-shaft, but it must be understood I mean on the cost-book system. The nominal capital of a limited liability company should be at least 15,000*l.*

Truro, Feb. 7. BRENTON SYMONS.

MINING IN THE TAVISTOCK DISTRICT.

SIR,—The mining world, which has been so long in a languid state, is soon likely to be agreeably surprised by the brilliant success now crowning the persevering efforts of the adventurers in the Devon and Cornwall United Mines, which bid fair to rival the Devon Great Consols, and will, no doubt, be the chief prize of 1865. This mine has been worked for nearly 20 years, and the present adventurers have taken a fresh lease for 21 years from last March, when the mine was not looking very encouraging, but within the last eight or nine months the discoveries have been so extensive, that instead of a balance against the mine there is now a balance of assets over liabilities of 907*l.*, and the reserves of ore are valued by the Duke of Bedford's agent at 47,000*l.* The driving hitherto has been confined to three lodes—a middle, a north, and a south lode—and these three lodes occasionally interlace each other, and form large deposits, and then they diverge again; consequently, the captain has had to gain his experience by much cross-cutting, &c.

A director of the Devon Great Consols, on hearing a description of these levels, said that they were precisely similar to those of the Devon Great Consols, and there was every reason to presume that they would be equally productive. The sett extends a mile and a half east and west from the River Tavy to the Tamar, and from the water line on each side an adit level has been driven, and now a shaft has been sunk in the middle of the sett to unite the George and Charlotte Mine on the Tamar side to the William and Mary Mine on the Tavy side. In the adit level, in the George and Charlotte, there was a long course of ore driven through about 50 or 60 fathoms west of the shaft, worth 20 tons, or 100*l.* per fathom, and the shaft being now sunk 24 fathoms below this level, a 24 fm. level is driven west 15 fathoms to get under this course of ore, which dips east towards the shaft, and if it lengthens in depth, as all the other lodes have been proved to do, it will not be very long before this course of ore is met with, and if it improves in depth, as every other part of the mine has done, it will prove a most extraordinary lode. The adit level, east of the shaft, has been driven through a very good course of ore ground, and the lode in the end is now worth 2 tons of ore per fathom, and likely to improve. This end is 10 fathoms in advance of the 12 fathom level east, which has been driven through a good course of ore, worth from 8 to 9 tons per fathom; the end is now poor, but in stoping about 10 fathoms west of the end a north lode has been found, 4 ft. wide, worth 5 tons per fathom; there is a stope working in this level worth 6 tons per fathom, and a stope in the adit level worth 5 tons per fathom. On the William and Mary side a course of ore has been driven through in the adit level, east of the shaft, from 12 to 15 fms., worth from 3 to 6 tons per fm.; and in the 10 fm. level the length through the ore is 35 fms., worth from 5 to 10 tons per fm. In the 22 fm. level 30 fms. has been driven through, worth from 6 to 12 tons of ore per fm.; the end being still worth 12 tons per fm., and likely, from the advance of the ore above, to continue another 20 fathoms. The 34 fathom level will shortly be under this ore ground, and should this level improve in depth in the same ratio as the other levels, the position of the mine will be everything that the most sanguine adventurer could wish. The costs of the mine are low, in consequence of having three large water-wheels on the Tavy, and two on the Tamar, and from these lines of rods are carried to the shafts, which are powerful enough to work the mine to a great depth. In conclusion, a great mining authority has well said it has been proved to demonstration that ore exists both shallow and in depth in the Tavistock district, and it only requires the judicious application of capital to secure its profitable development. P. J. L.

STICKLEPATH AND OKEHAMPTON AS A MINING DISTRICT—No. III.

SIR,—Several weak and inefficient trials in different parts of this district, besides those described in my last letter, have been made from time to time by local parties, all of them leaving conclusive evidence by their grassy burrows, often with stones and spots of ore throughout, that large quantities of mineral exist at deeper levels; but the capital to erect machinery and develope the lodes not being to hand, they were abandoned, after attaining a depth of a few fathoms only from surface. A new era, however, is dawning upon this district, and several setts have been taken up by experienced mining men, who, after a thorough examination, are awake to the value and importance of the district, and there is no doubt the next few years will see it thoroughly proved.

A company—the "Mid-Devon Copper Mining Association"—is now being formed to work a large tract of mineral ground, extending some six miles from east to west, and from two and a-half to three from north to south, embracing three distinct mines—the Taw River, Sticklepath, and Okehampton Mines.

TAW RIVER MINE has been played with for many years past in a similar manner to Fursdon, as described in my last letter; the whole of their lodes run through this property, and its geological position is very similar, being in a clay-slate, close to its junction with the granite. The first working was some twenty-five years ago, and was confined to shoding on the backs of the lodes. A local party then took it up, subscribed a small capital, and sunk a shaft 20 fms. deep. Here the lodes had a splendid appearance, and some rich copper ore was broken; but the company got into difficulties, and eventually the mine became the property of one person, who kept two or three men for years, his confidence in the mine being so great he was unwilling to stop it, although aware such a mode of working would not bring it to a profitable state; finally, finding himself unable to proceed with it, he, about a year and a-half since, sold out to the promoters of the Mid-Devon Copper Mining Association, who at once obtained a new lease for thirty years from the Duchy. They have erected a powerful plant of machinery, sufficient to prove the mine to a great depth, sunk a shaft to the 42 fm. level, and are now driving a cross-cut north to cut the lode; from their appearance at shallower levels there is little doubt copper ore in remunerative quantities will here be discovered. Water-power to any extent is available to work this property.

Adjoining Taw River Mine is the STICKLEPATH HILL MINE, now called Copper Hill, the old workings on which I alluded to in my last letter. This splendid property will now, as it deserves, have a thorough trial. The present company have a much larger sett than the old party, their grant extending from the road close to the village of Sticklepath to the River Okement, a distance of two miles. Several large lodes can be traced the whole of the distances, and good stones of copper ore, mixed with gossan, spar, &c., broken from their backs. They are intersected by cross-courses and caunter lodes, and a fine elvan course runs through the property. The country is a light-coloured clay-slate, granite being in close proximity. Water-power is also available to any extent to work this property.

The OKEHAMPTON MINE adjoins Copper Hill to the north-west, and is a large sett, embracing the town of Okehampton, and extending about two miles east and one mile west therefrom. The property contains several east and west lodes, of a strong masterly character. They were shoded upon by a resident of Okehampton twenty years ago, who put one pit down some 6 or 7 fms., where the lode was large, composed of gossan, spar, mundic, and stones of copper ore; but not finding the latter mineral in paying quantities, he abandoned it. The lodes can be traced in the beds of rivers, road-cuttings, &c., for more than a mile in length. The stratum is a light-blue clay-slate, highly mineralised, and several large cross-courses run through the sett. The present company have erected an efficient plant of machinery to thoroughly develope the property, sunk an engine-shaft 14 fms., and by a cross-cut intersected one of the lodes at that level last week. It presents, if possible, even a better appearance at that depth than a miner would expect from its appearance at surface, being 5 ft. wide, composed of spar, mundic, peach, prian, and copper ore, its bearing varying a few degrees only from east and west, and underlying north nearly, but not quite, 1 foot per fathom, and is letting out a large stream of water. The shaft is being rapidly sunk to the 30, where there is little doubt a profitable course of ore will be discovered. There are three other lodes within easy distance, which will be cut at that level, whose backs present appearances quite as good as the one now intersected.

The above three mines form the property about to be worked by the Mid-Devon Copper Mining Association. They have ample scope, numerous lodes of high promise, good geological position, and unlimited water-power. They have spiritedly pushed operations forward to this time, and if they continue to do so, and prove their large property thoroughly, the Mid-Devon will be second to no mine in the two counties, and the proprietors will reap a rich reward, and be the means, which is of far more importance, of opening up a profitable mining district, and giving employment to hundreds of poor men. For in a few years capitalists who have not now the spirit to invest in a sound, legitimate, *bona fide* mining undertaking because the district is comparatively unknown, will be coming in shoals to put their money into the pockets of mining jobbers, through the medium of the East Mid-Devons, West Mid-Devons, Mid-Devon Uniteds, &c., which will start up like mushrooms. N. C. H.

COST-BOOK MINES—PROMOTERS' AGREEMENTS.

SIR,—In reply to the questions put by your correspondent "B. G.," in the Journal of Jan. 28, I think the following answers will be found correct:—

To the first question—Can a number of individuals (say, three or four) legally enter into an agreement binding each other not to sell shares in a duly constituted cost-book company under a certain price?—I am clearly of opinion that they cannot, it being quite contrary to the law, the spirit, and the practice of the Cost-book Principle, the great object of that principle being to enable shareholders to get rid of any future liability by either selling or relinquishing their shares; and if they were bound not to sell under a certain price, they might be brought into no end of litigation for debts due from the company before the shares realise the price named, and be subject to any amount of calls, without having the means of selling a part of their interest to meet them. Again, it would be opening the door for the committal of great fraud; for instance, if the price were fixed at 20*l.* a share, a party might sell his shares, and receive from the purchaser the full sum of 20*l.* a share, and afterwards return him 10*l.* or 15*l.* a share, as might be agreed upon between them—in fact, selling the shares at 5*l.* a share.

To the second—If one of the persons thus agreed be appointed to negociate a sale, can he charge commission upon shares transferred?—Certainly not, unless a special agreement be made to that effect.

To the third—If, notwithstanding their mutual agreement, any of the parties transfer shares, does it affect the transferee, he being ignorant of the scheme concocted?—Of course it would, for the transferee would hold the shares upon the *same terms and conditions* that the transferor previously held them, one of which would be not to sell under a certain price.

To the fourth—Has the secretary the right to refuse to register a transfer emanating from any of the parties to the agreement, upon payment of all calls due?—Certainly not; the secretary or purser would be bound to register a transfer if all the calls had been paid, and it is no part of his duty to enquire into the consideration given for the shares.

To the fifth—The cost-book being the deed of partnership between the shareholders in a company, can any number of them assume a right to form a private agreement, fixing the price of shares, irrespective of the cost-book?—Clearly they cannot, as no number of shareholders can dictate to or control another as to how or for what price he is to dispose of his property.

To the sixth—How soon should a call be paid after it is made in a cost-book company?—That must depend entirely on the financial position of the company; strictly speaking, under the Cost-book Principle the company ought to have sufficient funds in hand to pay the estimated costs of the mine for two months forward. LEX.

Meetings of Mining Companies.

PROSPER UNITED MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Austinfriars, on Thursday,—Mr. PALMER in the chair.

Mr. J. H. MURCHISON (the secretary) read the notice convening the meeting, and the minutes of the last were approved.

A statement of accounts, made up to end of February, was submitted, which showed:—

Mine cost, merchants' bills, materials purchased, dues, sundries, &c.				£14,422 0 10
Balance last audit	£ 225	4	0	
Copper sold (June to January)	9042	0	8	
Tin ore sold	3936	12	9	
Lead ore sold	80	18	11	
Arsenic sold	136	10	6	£13,421 6 10
Leaving debit balance				£1,000 14 0

The report of the agents was read, as follows:—

Feb. 7.—Since our last account we have sunk Louisa's engine-shaft from the 80 to the 90 fathom level. The south part of the lode has been split into branches at the point of the horse, but no doubt in driving west they will unite and form a regular lode. We are driving north in this level, through the elvan, to intersect the north part of the lode, which will take about two months to reach. The 80 west, on the south part, has been extended to Hill's shaft, a distance of 45 fathoms. The lode for the first few fathoms produced some good ores on the south wall, but the whole of the ground will be taken away at a tribute of 10s. in 1*l.* The present end is worth 5*l.* per fathom for tin. The 70 has been driven 31 fathoms west of Hand's shaft; the first 20 fathoms of the lode produced 3 tons of ore per fathom, and the remaining 11 fathoms have been saving work for tin. The 60 has been extended west of Hand's shaft 22 fathoms; the last 15 fathoms will produce 3 tons of ore per fathom; the present end will yield 4 tons of ore per fathom. The 50 has been driven 41 fathoms from Hand's shaft; the lode for the last 21 fathoms has produced 2 tons of ore per fathom; the lode in the present end is composed principally of mundic; 5 fathoms behind this end there is a winze sinking, down 2 fathoms; here the lode will produce 3 tons of ore per fm. The 40 west has been driven 23 fms. from Hand's shaft; the lode is small and unproductive. The 80, north of Louisa's engine-shaft, has been extended from the cross-cut east 32 fathoms, through a lode that will average from 18 inches to 2 feet wide, composed principally of flookan and spar, with occasional stones of yellow copper; this level has also been extended 19 fathoms west of cross-cut, through an unproductive lode; both these levels are suspended. The 70 has been driven from cross-cut 37 fathoms west, the first 25 fathoms through a productive lode, and the remaining 13 fathoms will be taken away at a high tribute for tin. The 60 has been driven west of cross-cut 43 fathoms; the lode for the first 10 fathoms contained only occasional stones of yellow copper, the last 33 fathoms have yielded 2 tons of ore per fathom. The 50 has been driven 26 fathoms, through a lode that produced short bunches of ore; this level is suspended. Hand's shaft has been enlarged from 6 ft. long and 4 feet wide, to that of 14 feet long and 8 feet wide, from the surface to 7 fathoms below the 70; this has been a very expensive affair, not only in this enlargement, but also in cost of timber, being obliged to close timber it from the surface to this depth; we had also to provide and put down 80 fathoms of pitwork, erect the engine-house, boiler-house, stack, cistern, shears, &c. We are driving a cross-cut in the 80, south of Hosking's engine-shaft, to intersect Louisa's lode, which is standing nearly the whole length of the sett. We calculate that it ought to be seen in 6 fathoms driving. Since our last account we have explored in sinking and driving 410 fathoms 1 foot 3 inches. We have at present employed underground, on tutwork and tribute, 246 men; we have also at the surface, including enginemen, landers, fillers, and on the tin and copper floors, 183: total, 429. We estimate that our reserves of copper are equal to what they were six months ago, but the reserves of tin are not equal. However, we have to-day put Hand's engine to work, and we are in a good position to extend our levels westward with greater dispatch.—STEPHEN LEAN, WILLIAM H. MARTIN, WILLIAM MILLETT.

The CHAIRMAN moved that the report be entered in the minutes, and that the accounts be passed and allowed.

Mr. WESCOMB mentioned the circumstance, that upon this day of meeting the Prosper United Mines should stand at the head of the Ticketing List.—Mr. EDW. COOKE said it was still more singular that Prosper should stand at the head of the list, seeing what extremely modest reports their agents published.—The CHAIRMAN agreed with Mr. Cooke that no one would think from the reports that Prosper was making such satisfactory returns.—Mr. WESCOMB said his instructions always were, that if the agent thought any particular point of operation was worth (say) 6 tons of ore per fathom, but knew it was worth 5, to put it down at 4, when he might feel satisfied he would be on the right side.

Capt. MARTIN, in reply to a question, stated that the mine was opening out very satisfactorily, and that there were some very good stopes.

Mr. WESCOMB said that it would, no doubt, be in the recollection of the shareholders that at the last meeting it was decided to erect an engine in the western portion of the sett, to enable them to develope the ground, being unquestionably the best part of the mine. It was to be remembered that since the last meeting the shaft upon which this engine was erected had been increased in size, and close timbered from surface; indeed, in the present accounts there was charged 280*l.* for cutting down that (Hand's) shaft 70 fms., purchasing and erecting 80 fms. of pitwork, and erecting engine-house, engine, &c., the whole of which was, of course, additional or extra expenditure. There had also been incurred the outlay of driving west of Hand's shaft, and of laying open the ground, where there were at the present time in reserve 1200 tons of copper ore. He further mentioned that the ground in the western part of the mine was easy for driving. He considered all the ground that had been laid open was fairly productive, but some people might call it by a better name. As regards the eastern part of the mine, that continued to be a loss, but upon it they had their stamps, dressing-floors, and crusher, and all the apparatus for cleansing the ore. That part of the mine did not cost them less than 250*l.* to 300*l.* per month, and produced little or no ore.

Mr. E. COOKE enquired the extent of the sett west of Hand's shaft?—Mr. WESCOMB said there were about 167 fathoms of ground west of the shaft.

Capt. MARTIN stated that the shaft had been driven east about 60 fathoms.

Mr. WESCOMB, in reply to a question, said he could not advocate the stoping of the eastern part of the mine, because it was very certain if they stripped it, it would always remain poor. They might before long have accumulated such a surplus from the western ground as to enable them to appropriate a portion of it to the sinking of the eastern shaft. He need hardly say that some of the best mines in Cornwall had had their poor levels, but by continuous sinking had reached permanent deposits of ore.

Mr. MURCHISON mentioned that, comparing the present price of the ore with what it was 12 months since, the difference to Prosper amounted to more than 2000*l.*

Mr. WESCOMB was prepared to state that the accounts included every item that could be brought against the shareholders, the rule at the mine being—that the receiving-book for the month should be the guide for the charges in the cost-sheet of every month. It was not his intention to ask them for a call upon the present occasion, and, moreover, he hoped they would do without a call, and clear all up by next meeting. They must recollect there had been incurred a enormous expense, but, taking all things into consideration, he thought they would agee with him that the balance-sheet was a very satisfactory one.

Mr. JEFFERY enquired if the average monthly cost would be so large as during the past six months?—Mr. WESCOMB: Most certainly not.

Mr. E. COOKE had seen a great many balance-sheets, but in each everything was charged up closely. He thought they had now before them a very satisfactory future.—Mr. WESCOMB stated that there had been one sale of tin since the balance-sheet was made up, as well as a sale of copper, but against that there was one month's cost.

The CHAIRMAN considered the report and accounts were highly satisfactory. He thought there was reason to hope they would soon be in a position to declare dividends.

The report was ordered to be entered on the minutes, and the accounts were passed and allowed. A vote of thanks to the Chairman terminated the proceedings.

FRANK MILLS MINING COMPANY.

A general meeting of shareholders was held at Mr. Murchison's offices, Austinfriars, on Thursday,—Mr. J. Y. WATSON, F.G.S., in the chair.

Mr. WESCOMB (the purser) read the notice convening the meeting, and the minutes of the last were confirmed.

A statement of accounts for three months, ending with costs for Nov., was submitted, which showed—

Balance last audit	£1887	14	2	
Ore sold	4572	3	8	£6459 17 10
Mine cost, merchants' bills, &c.	£2400	7	9	
Coal and freight (three months)	166	10	9	
Discount on ore bills, bankers' commission, &c.	99	0	1	
Dues	333	9	3	2999 7 10
Leaving credit balance				£3460 10 0

The report of the agents was read, as follows:—

Feb. 7.—Since the last general meeting of the adventurers we have completed all the necessary work at the engine-shaft to the 115, cut a tip-plat, extended the cross cut west, and intersected the east and west lodes. The first lode was reached about 6 fms. west from the shaft, underlying westerly; its width is 2½ feet, and its composition quartz, mundic, and lead ore, yielding of the latter from 2 to 3 cwts. per fathom, and presenting a better appearance than in the level over the 100 fm. level. We have, however, since driven north on it about 2 fathoms, the greater part of which drivage has yielded 3 cwts. of lead ore per fathom. The lode in the present end is disordered by a slide, and consequently poor, but as the eastern lode has been generally subject to similar changes, we are expecting an early improvement. The west lode was reached about 12¼ fathoms west from the engine-shaft, underlying easterly; it is fully 12 feet wide, consisting of quartz, white iron, jack, and lead ores disseminated throughout, yielding of the latter 8 cwts. per fathom. Since cutting the lode we have driven about 2 fms. north by the western side of it, and from the numerous droppers, or lead branches, we have converging to a point, and the beautiful channel of ground in which they exist, we feel certain that we shall soon have a very productive lode. From the above it will be seen that the east lode is underlying west, while the west lode is underlying east—the former about 1½ ft., and the latter about 2 ft. per fathom; they are, therefore, converging together, and will form a junction before attaining the 130, where we may reasonably anticipate large courses of ore. The 100 has been extended north since the last meeting on the west lode about 20 fathoms; the lode has averaged 3 feet wide, and yielded from 10 to 12 cwts. of ore per fathom. In the present end it is 3 feet wide, and yielding 8 cwts. of lead per fathom, and looking well for improvement. We have holed the rise and winze from this to the 84, since which we have been engaged stoping the back of the 100, where the lode will give an average yield of 12 cwts. per fathom, of very good quality, and superior to that raised from the shallower parts of the mine; this stope is at present yielding 14 cwts. per fathom, and looking promising to hold up quite as productive. We have driven the 45, south from the north air-shaft, about 20 fms.; for many fathoms the lode yielded 5 to 8 cwts. of lead per fathom. The present end is unproductive, the lode being small. The lode in the northernmost wide stope, in back of the 45, has improved it value since the last meeting, being now from 10 to 12 ft. wide, and yielding 2 tons of lead ore per fathom, and looking well for holding up equally productive. The stope adjoining to the south has now got up a little above the back of the 45; the lode here is from 16 to 18 ft. wide, giving an average yield of 2¼ tons per fm., and also looking well going up. The tribute department during the past three months has been exceedingly productive, as our samplings will testify, and, we may add, the pitches are at present generally looking well, but in consequence of the very heavy floods and snow we have just experienced, the water has got into some of them, which has necessitated their suspension for the present, but as the pitches in the back of the 45 are so very porous, a week or so of dry weather would soon remedy this, and enable us again to resume operations. We give you the particulars of the pitches now working, to which we append the respective tributes:—No. 1, in back of the 45, north of air-shaft, by two men, at 4*l.* 10*s.* per ton. No. 1, in back of the 30, north and south of air-shaft, by two men, at 4*l.* per ton. No. 1, in back of the 45, south of air-shaft, by two men, at 4*l.* per ton. No. 1, in back of the 45, south of air-shaft, by two men, at 3*l.* 5*s.* per ton. No. 1, in back of the 45, south of air-shaft, by two men, at 2*l.* 4*s.* per ton No. 1, in back of the 45, south of air-shaft, by two men, at 2*l.* 15*s.* per ton. No. 1, in back of the 45, south of air-shaft, by four men, at 3*l.* per ton. No. 1, in back of the 60, south of air-shaft, by two men, at 4*l.* per ton. No. 1, in the back of the 60, south of air-shaft, by two men, at 3*l.* 15*s.* per ton. No. 1, in back of the 60, south of air-shaft, by two men, at 3*l.* 3*s.* per ton. No. 1, in back of the 60, south of air-shaft, by two men, at 3*l.* per ton. No. 1, in back of the 45, south of air-shaft, by two men, at 4*l.* per ton. Since sampling, on Jan. 19 last, we have much pleasure in informing you that we have dressed 30 tons of No. 1, and 45 tons of No. 2 lead ore. We have also on the dressing-floors 25 tons of No. 1, and 10 tons of No. 2; this is exclusive of all halvans, of which we have a great quantity. In conclusion, we have to remark that we expect to raise and sell for the current quarter an equal quantity of lead ore in value to that of the last. We anticipate the price of our No. 1 ore will reach 20*l.* per ton, as we shall increase our raising from the 100 and the lower levels, where the lead has improved for silver. All the machinery and the mine throughout in good order. The number of hands at present employed is 191.—J. P. NICHOLLS, J. CORNISH, R. ANDREWS.

The CHAIRMAN proposed that the report, which he thought all would agree was of a most satisfactory character, should be entered on the minutes, and that the accounts should be passed and allowed.

Mr. WESCOMB said that it had been thought desirable to hold the present meeting in London, to afford those who had recently become shareholders an opportunity of obtaining from the captain, who was present, any information with regard to the mine, which could not be embodied in an ordinary report. With regard to the accounts, he (Mr. Wescomb) was prepared to answer any question that might be put, and the more searching those questions the more satisfactory, he hoped, would be the information communicated.——Capt. NICHOLS (the agent), replying to questions, stated that the prospects in the 115 were unquestionably quite as encouraging as they were in the 100.

A SHAREHOLDER enquired the length of ore ground in the 100?——Capt. NICHOLLS said the ore ground in that level was upwards of 70 fms. in length. There had never been known in that district a run of ore ground so long and regular, nor so rich in quality.

Mr. E. COOKE enquired if there were any pitches at work in the 100?—Capt. NICHOLLS said there was only one stope, which was about 18 fms. in length.——Mr. E. COOKE supposed he need not put the question as to whether they ever under-stoped?——Capt. NICHOLLS said it not only had never been done, but it never would be done so long as he had anything to do with the mine.

A SHAREHOLDER asked Capt. Nicholls if he did not attach much importance to the reaching of the junction?——Capt. NICHOLLS replied in the affirmative.

Mr. E. COOKE enquired if Capt. NICHOLLS was disappointed at the value of the lode in the 115?—Capt. NICHOLLS: Most certainly not, the lode was very similar to that in the 100; and the encouraging feature was that in the deepest level, the 115, the lode was more productive, and had a more solid leader of lead. The lode in the 115 was in every respect as good as he expected to cut it.

Mr. COOKE thought it would be satisfactory to the shareholders to know if the character of the lode improved in depth.——Capt. NICHOLLS said that in depth the lode became more settled, and assumed more the appearance of a defined course of ore—more like a copper lode in some of our established copper mines.

The CHAIRMAN asked the value of the two branches before they separated in the 100?——Capt. NICHOLLS said the two branches were worth from 10 to 12 cwts. per fm., for the driving of which they were paying from two to three guineas per fm., and the 115 they were paying 2*l.* per fathom.

Mr. E. COOKE said that as the lode was worth (say) 12*l.* per fm., and the cost for driving about 3*l.* per fm, it must be evident to the most uninitiated that they were working to a considerable profit; indeed, as great a profit as in some mines of a different character of ground, where there was a lode worth from 40*l.* to 50*l.* per fm. It would be in the recollection of some present that the enormous profits of East Wheal Rose were derived from lodes of the average value of about 7*l.* to 8*l.* per fm.

Capt. NICHOLLS said that the average amount paid for driving in Frank Mills did not exceed 2*l.* per fathom.—A SHAREHOLDER suggested that Capt. Nicholls should for the future state in his reports the money value of the ground per fathom.

The CHAIRMAN said that as Mr. Adam Murray was underground yesterday, it would, no doubt, be satisfactory to the shareholders to hear his opinion of the position and prospects of the property.—Mr. ADAM MURRAY said that being a very large shareholder, he, for his own satisfaction, inspected the mine yesterday. But the questions put by Mr. Cooke had so fully elucidated the position and prospects of the mine, that he (Mr. Murray) did not know he had much to add. Perhaps, however, he might mention that he fully agreed with Capt. Nicholls as to the great improvement that had taken place in the character of the lode in depth, being now of a beautifully uniform character, and giving every indication of becoming a permanent mine. He thought the junction of the two lodes would take place in about another 15 fathoms sinking. Hitherto this district had only been worked to a limited depth, and, therefore, Frank Mills was a kind of pioneer mine. As to its favourable prospects, he most fully endorsed all that Capt. Nicholls had stated, and his report was most cautiously written.

A SHAREHOLDER enquired the extent of the sett?——Mr. MURRAY replied that it was about 600 fathoms, north and south, on the line of the lode.

A SHAREHOLDER enquired the distance of South Exmouth from Frank Mills?——Capt. NICHOLLS thought the two nearest ends in both mines might be about 600 fathoms from each other.

Mr. WESCOMB, referring to the financial state of the company, said that the detailed balance-sheet, a copy of which would be forwarded to each shareholder, was an analysis of the general balance-sheet, which showed the result of the operations of the past quarter. This analysis had been made out in order that shareholders might be the more fully satisfied upon any point whereon they required information. By those accounts it would be seen that there was a credit balance of 3460*l.*, out of which the committee recommended a dividend of 6*s.* per share. That would absorb 1500*l.*, leaving an amount of 1960*l.* to be carried forward to the credit of the NEXT account. Referring to the items in the accounts, he mentioned that the coals and freight were kept separately, because the company imported direct from Wales, freighting their own vessels, and always importing their own coals. As regards the item for discounting ore bills, he was afraid that must be continued, and for this reason—if they were selling tin they would sell for cash; if they were selling copper at the end of one month, they would get the bill for it in another month; but when they sold lead it was by three months' bills, which, of course, had to be discounted. The item, however, in the balance-sheet, included commission on cheques for the past six months.

The CHAIRMAN said the next question was as to the amount of dividend to be declared. As the meeting had already been informed, the committee recommend a dividend of 6*s.* per share, which he had much pleasure in proposing.

The resolution having been duly seconded, was put, and carried unanimously.

Mr. GLOVER had great pleasure in proposing that the best thanks of the shareholders be accorded to Captain Nicholls, who had been connected with the mine from its commencement, for the efficient and zealous manner in which he had brought it to its present condition of prosperity.——Mr. WARDROPPER had much pleasure in seconding the proposition.——Mr. WESCOMB could not allow that resolution to be put without bearing prrsonal testimony to the efficiency and zeal of Capt. Nicholls—than whom no man could have more sedulously devoted himself to his duties. He (Mr. Wescomb) had known Capt. Nicholls for something like twelve years, and he knew no man who had displayed more energy, skill, or economy. Capt. Nicholls never made extravagant promises, but such promises as he did make were fully realised by results—a better captain they could not possibly find.—The resolution was put, and carried unanimously.

Capt. NICHOLLS, in acknowledging the compliment, returned to the shareholders his sincere thanks, and hoped that he would never give reason to lessen their confidence. If he occupied the position another 12 years he hoped he should merit the same good

opinion.——A unanimous vote of thanks was also passed to Mr. Wescomb, which was acknowledged in appropriate terms.

A resolution was passed requesting the committee to endeavour to make better terms for conducting the bank account.

A vote of thanks to the Chairman terminated the proceedings.

WHEAL KITTY (ST. AGNES) MINING COMPANY.

The quarterly general meeting of shareholders was held at the offices of the company, No. 22A, Austinfriars, Feb. 4,

Colonel W. CLARKE in the chair.

Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed.

A statement of accounts for three months, ending with costs for November, was submitted, from which the following is condensed:—

Tin sold				£3653	0	11
Copper sold				50	0	0= £3703 0 11
September mine cost, merchants' bills, &c.			£	921	5	10
October ditto				900	5	7
November ditto				1100	5	5
Sundries (secretary, committee, and petty expenses)				54	14	10
Tin ore over-credited last meeting				20	11	6= 3007 3 2
Leaving credit balance (profit)						£695 17 9

The report of the agents was read, as follows:—

Feb. 3.—We are still driving the 82 fm. level cross-cut south from the engine-shaft, with the view to cut Pryor's lode; the distance yet to drive to accomplish this we cannot speak definitely of, but we hope to be enabled to form a better opinion in the course of a month from this time, as we shall see the lode in the 44 fm. level cross-cut, south of Holgate's shaft.—Holgate's Shaft: In the 82 fm. level, driving west of shaft, the lode is large, and producing stones of tin occasionally. We have suspended the driving of the 84 fm. level west since the last meeting, the lode being poor.—Pryor's Lode: In the 65 fm. level, driving west of new shaft, the lode is large, and worth for tin 20*l.* per fm. In the 46 fathom level, driving east of shaft, the lode is worth for tin 8*l.* per fathom. In the 54, driving west of shaft, the lode is worth for tin 12*l.* per fathom. In the 54, driving east of shaft, the lode is worth for tin 9*l.* per fathom. In the 44, driving west of shaft, the lode is worth for tin 11*l.* per fathom. In the 44, driving east of shaft, the lode is worth for tin 8*l.* per fathom. In the 34, driving east of shaft, the lode is very much improved since the last meeting, being now worth for tin 8*l.* per fathom, with kindly appearances for further improvement. In the adit level, driving west of cross-cut, the lode is worth for tin 4*l.* per fathom. We are driving the 24 fm. level cross-cut south, and hope to cut Pryor's lode in this direction within the next 10 fathoms. The new shaft is cased and divided, and the skip-road put in and completed to the bottom of the downright, which is 60 fms. from surface, and will be completed to the 34 in another week. We have been compelled to abandon our operations at Wheal Vottle in consequence of the surface water coming in the mine; we hope, however, to be enabled to resume the working as the summer months approach. We shall also endeavour to effect a communication with the 44 fm. level cross-cut referred to above in the coming summer. We have sold about 65 tons of tin during the quarter; had we the usual or former price, the dividend would be far greater.—WM. TEAGUE, STEPHEN DAVEY, WM. POLKINGHORNE.

The CHAIRMAN said that during the three months embraced in the accounts there had been sold 64 tons of tin, which had realised 3653*l.*; but, had tin been sold at the average rate which ruled some short time since—about 74*l.* per ton—it would had made a difference to the company in three months of something like 1200*l.*

Mr. E. KING, in reply to a question, stated that, consequent upon the Banca sale of tin having been indefinitely postponed, the value of foreign tin had advanced 4*l.* per ton. He hoped that the market had seen its worst, and that English tin would soon show a marked improvement in value. So important was the price of tin to the shareholders in Wheal Kitty, that 5*l.* per ton made a difference of a dividend of nearly 2*s.* 6*d.* per share per quarter. Under those circumstances, he need hardly say that they all most sincerely joined in the wish expressed in the old Cornish toast—"A better price for tin." As far as the mine was concerned, he was glad to be in a position to state that it was equally as productive as at any former period, and any shareholder who would take the trouble to compare the different items of costs with those that had hitherto ruled, and to note the great reduction that had been made in every department, would agree with him that there was the greatest credit due to their present manager. At the present time there were but four tin mines in Cornwall paying dividends, and Wheal Kitty was one of them.

Mr. FLOYER wished to know what progress was being made with the cross-cuts?——Mr. E. KING said that they were progressing satisfactorily, and it was generally believed that the shallow part of the mine would in a few months become very productive.

The report was ordered to be entered on the minutes, and the accounts were passed and allowed.

Mr. RENCH said the committee had that morning considered the financial position of the company, and, taking every circumstance into consideration, they were agreed in recommending the directors to declare upon the present occasion a dividend of not more than 3*s.* per share, the payment of which would absorb 644*l.* out of the quarter's profits of 695*l.* Reckoning the amount brought forward to the credit of the account last meeting, there would be carried forward to the credit of the next account something like 300*l.*

The CHAIRMAN mentioned that if tin had kept up in price Wheal Kitty would at the present time be making a nett profit of 8000*l.* per annum.

A dividend of 3*s.* per share was then declared.

A vote of thanks to the Chairman was passed.

The CHAIRMAN thanked the shareholders for the compliment, and expressed a hope that before the next general meeting such an advance in the price of tin would take place as would enable the committee to recommend an increased dividend.

The proceedings then terminated.

LANIVET MINING COMPANY.

At the half-yearly meeting of proprietors, held at Liverpool, on Wednesday, the directors' report was adopted, and the accounts received and passed. The following is an abstract of receipts and expenditure for the half-year ending Dec. 31:—

Balance in hand, June 30, by last statement			£	344	17	4
Calls received				1036	12	0
Interest received				5	10	6= £1286 19 10
Labour pay and merchants' bills, six months			£	1228	3	3
Office and petty expenses				9	10	10= 1237 14 1
Leaving balance in hand						£ 49 5 9

The following report, from Capt. Teague, was read:—

On Vance's lode we are stoping the ground west of and drained by Oulton's shaft. This is being put through the stamps, and will pay well for working, but we do not expect the tin ground to continue valuable far above the back of the level, for in sinking the shaft regular paying stuff only began to appear a few feet from the bottom; but, although we do not expect much above the 10, we believe that sinking another 10 fms. will open up valuable tin ground. On Tregay's lode we have driven the 20, east and west of Petrie's shaft, 10 fms. The lode here, though not so good as Vance's lode, in the bottom of Oulton's, has, like it, improved considerably in the last few feet sunk, and we believe that by the extension of this level east and west we shall meet with still further improvement; still the best chance of profitable working is in sinking to a deeper level. Account-house shaft has been sunk 11 fms., and the 10 driven east and west 10 fms.; the lode in each of these ends is worth 4*l.* per fm., now being stoped at 15*s.* per fathom. On bringing home the 20 from Petre's, under this, we expect an improvement. About 8 fms. west of Petre's we have put down a trial shaft about 10 fms., on a lode worth 5*l.* per fm. We expect improvement in the 20 from Petre's when driven under this point; this is being wrought on tribute. We are steadily stamping the tinstuff, and expect to be able to bring a parcel into the market about the end of this month. The course we recommend is to sink the two shafts each 10 fms., to develope the lodes by the extension of levels and sinking on the most favourable points. The result expected is the cutting rich bunches of tin, which we fully believe will be met with here; and at the same time opening a large quantity of coarser quality tin ground, that, with tin at the same price as it was at the formation of the company, will pay for working. But in the sinking we do not doubt that we shall meet with considerable and general improvement. The ground, although hard in the present shafts, is changeable, and in some parts much freer and more readily worked, and we have no doubt of getting a change in each of the shafts before many fathoms sinking. The lodes are large, strong, well defined, and producing quite as much tin as most of the now profitable mines produced at the same depth. The surrounding rock is a regular tin-producing granite. We think the prospects of this mine are very good, and that it only requires a little more perseverance and a limited capital to ensure success.

At the conclusion of the ordinary business, the meeting was made special, and a resolution, passed at an extraordinary general meeting, held on Jan. 19, for increasing the capital of the company by the creation of 1500 10 per cent. preference shares of 2*l.* each, was unanimously confirmed.

CLOWANCE WOOD MINING COMPANY (LIMITED).

The first annual general meeting of shareholders was held at the company's offices, New Broad-street, on Monday,

Mr. MILES CHARLES SETON in the chair.

Mr. G. H. CARDOZO (secretary) read the notice convening the meeting. The balance-sheet showed—

DR.—To capital called up				£8705	0	0
Creditors				1285	15	3= £9990 15 3
CR.—By property, mine, engine, labour and materials in moving and erecting, &c., engine-house, buildings, &c.				£8892	0	6
Cash at National Bank, and bills receivable				73	10	1
Shareholders in arrear				701	11	8
Preliminary expenses				200	0	0
Profit and loss				123	13	0= £9990 15 3

The report of the directors stated that, while they regretted the whole of the shares were not allotted, they cannot but congratulate their co-proprietors on the rapidity with which the surface and underground operations at the mine had been carried on; this will account for what may be considered a somewhat large cost for the first year. The engine-shaft is already down 14 fms. below adit, or 34 fms. from surface, and, when another 6 fms. are sunk, it is the intention of the directors to cross-cut to the lode called Wheal Penny; and, judging from the more than ordinary indication of riches in depth at the adit level, they fully believe that the expectations of the best mining authorities will be realised, and that the lode will be found productive at the 20 fm. level. The monthly cost has now settled down to an average of about 135*l.*

The report of the agent was read, as follows:—

Feb. 4.—Since the last meeting of shareholders we have sunk the engine-shaft 9¼ fms., now sinking by nine men, at 15*l.* 10*s.* per fathom; the shaft is now down 14½ fathoms below the adit. We have 5½ fathoms further to sink to the 20 fm. level, where we propose cutting a plat; then cross-cut to the north lode, which is about 15 fms. distant, and, judging from the nature of the lode seen in the adit level, we may expect it to be productive; at the same time, we recommend continuing sinking the engine-shaft to the 30 fm. level, and then throw out cross-cuts north and south to the different lodes—one, a north lode, is about 13 fms. off at the 30, and the south lode is about 40 fms. from the 30; these lodes are considered by most parties likely to be very productive. The water appears to have increased but little; the consumption of coals is about 4½ tons per week. We have cleared and secured about 500 fms. of adit, cleared up two shafts, also 150 fms. on the south side, for the purpose of taking up all the surface water, which at this season is of great importance. We must continue to prosecute this surface drainage, which will only add a few pounds extra to the cost.—EDWARD CHEGWIN.

The CHAIRMAN proposed the adoption of the report and accounts, and in doing so said that every statement received from the mine justified the assumption that when the lode, so promising at the adit level, was intersected at a deeper point of operation, Clowance Wood, which was situated in the heart of one of the best mining districts in Cornwall, would prove itself no unimportant neighbour of the great mines surrounding it.

Mr. CARDOZO, in replying to a shareholder, said he had every reason to believe that when the lode was seen at the cross-cut it would prove productive. When last on the mine he took considerable trouble to ascertain the opinion of the best agents in the district, and they unanimously agreed that, judging from what parallel lodes in the adjoining rich mines had proved to be at about the 20 fm. level, the shareholders had the strongest ground for expecting that the lodes in Clowance Wood would prove equally rich at a similar depth.

Mr. THOMPSON, in seconding the proposition for the adoption of the report, suggested the advisability of the directors and shareholders agreeing upon some means whereby the unallotted shares could be taken up. He did not offer this suggestion without himself being willing to increase his interest, although at present one of the largest shareholders in the company. As there could be no question that, when further developed, the mine would produce results fully equal to the expectations of the most sanguine shareholders, he thought that those already interested would be materially advancing their individual interest by increasing the number of their shares, and thus provide the working capital necessary for the due development of the property.

The CHAIRMAN said that the subject had been mooted at the meeting of the directors, who, he might mention, were willing to increase their stake if the shareholders would agree to co-operate with them.——Mr. CARDOZO said he had that morning received a letter from a large shareholder in Liverpool, who had offered to take 100 of the unallotted shares, provided the shareholders in London agreed to increase their holdings in the same proportion. If the shareholders would but evince the same spirit, the whole of the unallotted shares would be taken up, and the capital thus obtained would enable the directors to bring about the desired results much more rapidly than they could at present anticipate.——The report was received and adopted unanimously. The retiring directors were re-elected. Mr. H. Shaw was appointed auditor for the ensuing year.

A vote of thanks to the Chairman and directors terminated the proceedings.

FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.—Since the general meeting (the details of which appeared in last week's Journal) the directors, desirous of placing before the shareholders all the facts that have come to their knowledge relative to the position and prospects of the undertaking, have embraced in a concise form the most important extracts from the correspondence received from the mines, which cannot fail to be most satisfactory to those interested. Writing from the Bolivia Mines, Capt. Teague states that the estate is one of the famous mining estates in the great gold mining districts of Antioquia; it embraces numerous large and thoroughly well-defined lodes, two only having been wrought on to any extent. In the La Salada Mine there is one level, driven on the course of the lode about 15 fms., the lode producing for about 10 fms. in length 1½ oz. of gold per ton of stuff. In the bottom of the level there is a winze sunk, about 4 fathoms deep, where the lode is worth 2 ozs. of gold per ton. The Bolivia property is described as being amply provided with magnificent wood of all dimensions and descriptions, well adapted for all mining purposes, and can be procured in the least possible time. Capt. Goyen (the company's manager), referring to the same property, says that the prospects were cheering indeed. A level had been extended westward on the course of the lode (about 30 fms.), above which there are about 12 fms. of backs, where the leader part of the lode is full 5 ft. wide, producing on an average ⅛ oz. of gold to the ton; but below this level, and about 15 fms. from the present end, there has been sunk a winze 4 fms., the lode (5 ft. wide), producing more than 2 ozs. of fine gold to the ton of stuff. Capt. Teague (writing from the same mine on Dec. 7) states that there were two men driving on the course of the lode west, on a beautiful promising lode, about 7 ft. wide, producing ⅛ oz. of gold to the ton of stuff. One man was engaged exploring the lode behind the end, where it was found precisely of the same value, size, and character as the lode in the end; about midway from the outlet to the end there is a winze sunk; in bottom of the level the lode is 5 to 6 ft. wide, producing 2 ozs. of gold to the ton of stuff. There was a large and promising lode to the north, which (Captain Teague states) will, no doubt, from its appearances and character, yield large quantities of gold in depth. There has been also sunk another winze further east, in a splendid looking lode, producing gold in quantities to compete with the first winze. Judging from the work done on the back, both east and west of the winze, there is sufficient evidence to show, when fully developed, there will be two lodes very rich for gold, and when the property is explored on a large scale, with energy and economy, there is every assurance this will prove a most satisfactory undertaking. Capt. Goyen was actively engaged in expediting the erection of the steam-stamps, and all other appliances necessary for the vigorous development of the mine. Referring to the Frontino Mine (which Capt. Goyen reached on Nov. 9), he states that the lode in the bottom was looking well, but worked very much out of order. The engine-shaft, when Capt. Goyen left in May, 1863, was sunk 10 fms. below the tramroad level, and good series of stopes (east and west) about 80 fms. in length, but at present there are no stopes, with the exception of 3 fms., which the company's miners have sunk since their arrival. Capt. Goyen's object was to sink the engine-shaft as fast as possible, in order to open up more stoping ground, for until then it would be impossible to quarry sufficient mineral for the stamps, which would soon be at work.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market continues dull, and the amount of business transacted during the week appears in the aggregate to have been very restricted. Still, from the enquiries made, there is every reason to calculate upon an improved market.

WEST SETON and WHEAL SETON shares have been enquired for, but few transactions reported.—CLIFFORDS have been more freely dealt in, and, after some fluctuations, left off better.—WHEAL BASSETS continue to be enquired for, but found rather scarce.—EAST BASSETS are freely offered, but buyers shy.—WEST TOLGUS have been in request, but since offered at lower rates.—GREAT SOUTH TOLGUS, after a slight improvement, again receded.—EAST CARN BREAS have changed hands at minimum quotations.—CARN BREAS have been enquired for, but found scarce.—NANGILES are remarkably quiet at present quotations.—STRAY PARKS have been in better demand, and an advance followed.—GREAT LAXEYS are still in fair demand at lower rates, but prices are firm.—GREAT NORTH LAXEYS have been in good request, and a large number of shares are reported to have changed hands.—TINCROFTS have been in better demand, and several transactions followed.—EAST GRENVILLES have, as usual, been dealt in, but prices have fluctuated.—WHEAL GRENVILLES continue dull at market quotations.—NORTH TRESKERBYS are very quiet, even at minimum prices.—NORTH CROFTYS are offered at lower rates, but remain inactive.—CARN CAMBORNES are slightly firmer, but little doing.—HALLENBEAGLES are sought for at buyers' prices, but are not plentiful.—PEDN-AN-DREAS have changed hands, and show a tendency to advance, in consequence of the reported improvements which have taken place in the mine.—MAUDLINS have been dealt in, and numerous enquiries made at buyers' figures. WEST CHIVERTONS have been done at slightly reduced rates, but show a tendency to recover.—CHIVERTON and MINERAL BOTTOM have changed hands at minimum quotations.—NORTH CHIVERTONS are rather quiet.—GREAT WHEAL VORS have been rather freely dealt in, without any corresponding advance in price, and appear firm.—EAST WHEAL LOVELLS have not been in good demand, but show firmness at present quotations.

SITHNEY WHEAL METALS have been dealt in, but left off weaker.—BASSET AND GRYLLS have changed hands at nominal figures.—UNITYS have been more freely enquired for, and done at slightly improved rates.—PROVIDENCE shares have been sought at buyers' prices. — EAST CARADONS are firm and scarce, especially for immediate delivery.—MARKE VALLEYS have been quoted lower, but left off firm at an advance.—WEST CARADONS are quiet.—TRELAWNYS have been in good demand at minimum quotations.—MARY ANNS are sought for at buyers' prices.—HINGSTON DOWNS are less active.—EAST RUSSELLS have changed hands at lower rates, and are freely offered.—WHEAL CREBORS have slightly improved, and more in request.

EAST CARADON.—The 80 east and west, on the caunter, continues to maintain the improvement noticed last week, each end being still worth 18*l.* per fm., with more favourable indications of further improvement. The 60 west, on the new lode, has slightly improved in value, but more in general appearances.

GREAT DEVON AND BEDFORD (Colcharion).—The engine-shaft is sinking below the 40. The lode in the 40 west is of a very promising character, attended by appearances which indicate a more favourable change at no great distance. In driving east similar appearances are presented. The 30 west is in a lode 2 ft. wide, carrying more copper ore, and encouraging; the belief is that a course of ore will be shortly met with.

CALSTOCK CONSOLS.—The cross-cut driving towards the Okel Tor, or Danescombe lode, is driven south 85 fms., and a few fathoms more will intersect it 150 fms. east of the Danescombe old engine-shaft. They are also pressing on the western level towards the junction, where some discovery of importance is fully expected.—OKEL TOR: The mine generally is looking well, and returns increasing. The stopes continue to yield from 6 to 10 tons of ore per fm.—CORNWALL GREAT CONSOLS: The shaft is down 20 fms., in the bottom of which they have a very promising lode; from its general character ore is calculated upon before sinking much deeper. The late rains have retarded the sinking.

NORTH TRESKERBY is represented to have improved in several very important points, so that there is every probability of the increased returns being very considerable. At the engine-shaft operations are being directed to objects the achievement of which will open some valuable ore ground; and in Tresidder's shaft, particularly in the deeper levels, there are some very excellent discoveries in prospective, so that the mine generally is looking better now than for some months past.

EAST JANE.—The prospects of an improvement in the 36 south are daily increasing, and the general impression is that a good lode will be met with in the western portion of the mine. The 26 south is producing some good saving work, and likely to improve very considerably. The other points of operation continue much the same, yielding the usual quantities of lead ore.

WHEAL PAR is represented to be progressing very satisfactorily; they have recently intersected a lode by the 20 fm. level cross-cut south, worth 10*l.* per fathom for tin, and looking very promising. There are other places looking well for improvement.

MAUDLIN MINE.—The engine-shaft, sinking under the 70, is progressing satisfactorily, and when down and under the rich course of ore the returns will, no doubt, be large and of a rich quality. The 70 east is worth 60*l.* per fathom; but the lode is not yet free of gossan. The 70 west for several fathoms proved a valuable lode, but the gossan coming in it became less productive; now the gossan appears to be leaving, and the end assuming its former character: the rise is worth 20*l.* per fathom. Several important measures are about to be brought into operation, which will prove the value of the property to be great; and it is rather surprising that the western shaft has not been sunk under the vast body of gossan which is found there, as under similar deposits immense quantities of the richest ores were returned during the former workings.

WEST CHIVERTON.—In driving the cross-cut through Williams's lode, at the 90, they have a further improvement, making the lode worth 70*l.* per fathom, which is about the same value as at the 80, when cut through. The western part of the mine is much improved, whilst the three winzes in the bottom of the 80 continue of the aggregate value of 360*l.* per fathom. The fortnightly sale of silver-lead ore took place on Wednesday, when 120 tons realised 1873*l.* 14*s.*, which, with the former sale, will give upwards of 4100*l.* for the month.

EAST WHEAL LOVELL.—Every effort is being made to bring this property into a most efficient state of working, by laying open long runs of tin ground preparatory to its becoming a permanent paying mine. There are two points at least from whence large returns can be made—the bottom of the new engine-shaft, which is reported worth 100*l.* per fathom, and the lode in the south shaft is valued at upwards of 90*l.*, which has further improved. They are driving a cross-cut from the north to the south lode, which are but a few fathoms apart, and when communicated will open some very valuable tin ground, which will be taken away at a low cost. At the Turnpike shaft great improvements are anticipated, so that when the proposed works are completed there remains little or no doubt as to its future permanency.

SOUTH LOVELL.—Now that a favourable change has taken place in the weather, greater will be the progress in the completion of the engine, pitwork, &c., so as to drain the shaft, and bring the tin laid open to surface, and make further and more important discoveries. The lode in the northern shaft is still worth 25*l.* per fathom, and other places of the same value as last noticed.

NEW WENDRON CONSOLS.—The prospects of this adventure continues to rapidly improve, and it bids fair to take a prominent position among the mines of that highly-mineralised locality. The shaft is down nearly 5 fms. under the 24, where they have a lode worth 25*l.* per fm., and promising well for further improvement. The stope in back of the 24 east is worth fully 18*l.* per fm., and west 14*l.* per fm. The lode east is hove by a caunter, but we daily expect to meet with it again.

GREAT WHEAL VOR is represented as never looking better than at the present time, but more especially at Ivey's shaft, where the lode is estimated to be worth fully 500*l.* per fathom for tin.

At PROSPER UNITED the future prospects are of the most encouraging character, and although the balance against the adventurers for the last six months of 1000*l.* may appear large, there has been expended 2800*l.* out of the profits for that period in the erection of a new engine, the necessary pitwork, and a large item for cutting down the shaft requisite for the same. The mine has generally improved, and it is fully anticipated that by the next half-yearly meeting the whole of the liabilities will be cleared off, and a profit exhibited. The decline in the standard for copper and tin has had a serious effect on the financial position of the mine.

GOTHIC.—The ore ground in the 25 west, and 30 east of the engine-shaft, is worth together upwards of 1 ton per fm. The western level, which has now gone into the old workings, has yielded 30 cwts. per fm., and the east about 16 cwts. At a level so shallow as this under the adit it may be taken as a good yield, and one that holds out a prospect of a great mine, being similar to those of the now productive mines of the locality, although some of the most flourishing at corresponding depths only yielded from 6 cwts. to 7 cwts. per fm.

GREAT NORTH LAXEY (Limited).—The resuscitation of this property under a new and effective proprietary evinces every probability of its being attended with great and important results. It has long been a matter of wonder with those unacquainted with its true position that so valuable a piece of ground which comprises this sett, with the well-known rich and productive lodes of Great Laxey traversing its entire length of two miles, combining the great advantages of abundant water-power, under the able management of the same experienced agent, should have remained so ineffectually worked. But when the inadequacy hitherto of capital employed to develope the lodes to the requisite depth is taken into consideration, the cause of procrastination may be readily arrived at. The recent efforts to re-establish the present company with sufficient means for all purposes are effected. It will prove highly gratifying to the promoters to observe the rapidity with which the shares are being applied for, exhibiting, as it does, public appreciation, as well as discrimination, of what is good and valuable. It is barely two years since that Great Laxey was in a very inactive position, probably from the same cause; but now that it has been reconstituted immense discoveries of lead, blende, and copper have been laid open to almost an incalculable amount, making annual profits, according to the last six months, of fully 34,000*l.*, with every probability of a greater increase, and similar results are fully anticipated on the effectual development of Great North Laxey Mine. JAMES LANE.

From Mr. EDWARD COOKE: The decidedly favourable change in the weather has manifested itself in imparting a better tone to the market generally, although no absolute return to activity has as yet taken place. Dividend mines, however, are not to be very readily bought, unless at full prices, while several good progressive mines meet with ready buyers when the shares are offered at current prices. PROSPER UNITED shares have been decidedly firmer, owing to the gradually improving state of the mine. Owing to the erection of the new engine, with all its requirements, at Hand's shaft, together with a large outlay for 80 fms. of pumps and timber for same (which will all be paid for out of the returns of the mine), the cost during the past six months has been unusually heavy. The decline in price of copper and tin in the meantime exceeds 1800*l.*, as compared with the prices of these metals some 12 months since. The future, therefore, is full of hope, and the shareholders may, I believe, congratulate themselves upon being reimbursed by-and-bye the outlay they have made, together with good interest upon the same. At the meeting of FRANK MILLS, on Thursday last, a dividend of 6*s.* per share was declared, with every prospect of its being maintained. The report of the agent, as read at the meeting, was highly satisfactory, showing that a most important point in view was the junction of lodes in the 130. I recur with much pleasure to the favourable position of this mine, which I have strenuously advocated in the columns of the Journal ever since the shares were at about 4*l.* each. With the same degree of confidence I advocated the merits of GREAT NORTH LAXEY and SOUTH DARREN, feeling very sanguine that whoever buys into them at present prices will ere long be enabled to realise profits that will compensate for losses they may have sustained in other mines that may have disappointed their expectations. The report from Capt. Rowe this week states that Great North Laxey has already improved in the adit level, and, in addition to the shaft (sinking in a productive lode), the 60 south has been resumed to drive south in an unusually promising lode, as compared with anything before seen in this mine. The lode is full 3 ft. wide, containing both lead and blende. This is highly encouraging of a mine, coming, as it does, from such an authority. It must be remembered that Great North Laxey Mine is now in full operation, with a shaft sunk to a depth that would have required years to accomplish, and with a lode that has gradually improved for many fathoms in sinking upon; therefore, without appearing to be too sanguine, it is only fair to anticipate a portion of, if not equal, success to that of the adjoining mine, Great Laxey. No one can but rejoice at the great success of Great Laxey, which has placed many individuals in a state of comparative affluence, arising from the rapid and immense discoveries of silver-lead during the past 12 months, and no one, I am sure, can fail to wish the same success to Great North Laxey, which at the present time holds out prospects equally as promising as did Great Laxey 12 month since. With regard to South Darren, if anyone will take the pains to look at the plan of this mine, and the reports of the agent, they cannot fail to be convinced that it is opening up one of the best mines in Wales. The lode in the various levels has continued to increase in value in depth, and there are now four levels all driving in profitable ground, and opening up good reserves. Looking at the plan, it would appear that the 50 is approaching the centre of a large deposit of ore. Probably when the shares are double the price they now are, and the mine paying good dividends, it will be remembered that I advocated their being bought at 40*s.* to 50*s.*, with 3*l.* 6*s.* 6*d.* paid, and limited to 3*l.* 10*s.* According to present prospects, there is no probability of another penny being required from the shareholders before South Darren becomes a dividend mine.

EAST VOR is without change, but a very important feature in this mine, not generally known by the shareholders, is the fact that close to its western boundary a shaft has been sunk by the Sithney Wheal Metal Company, on the Wheal Metal lode, where the lode has been valued at 12*l.* per fathom. This cannot fail to add great importance to East Wheal Vor, and a feature in it which will be, some time, turned to good account for the company. EAST WHEAL LOVELL may well be said to have overcome all its difficulties, and those who are content to wait for the results will be rewarded for their patience. It has been told me by a thorough practical man, having nothing whatever to do with the management of East Lovell, that the new discovery on what is termed the Turnpike lode will (when the flat-rods are completed to it from the new shaft), in his opinion, return tin enough to nearly pay the whole costs of the mine. If this be so, the profits from the very rich north and south lodes must necessarily be very great. The shares are still being bought by parties residing in the locality of the mine. NORTH CHIVERTON has improved for lead in several places, and is opening up exceedingly well, probably second to no mine in Cornwall.

From Mr. G. BATTERS:—No large amount of business has been transacted during the week in mining shares; what has been done has been chiefly for investment. There is little or no speculative business doing. The movements in metals or money, or anything to affect the mining interest, have been unimportant. Shares that have commanded chief attention have been Great Wheal Vor, West Chiverton, Clifford, Wentworth, Mineral Bottom, &c. GREAT WHEAL VORS are firm and scarce for delivery, at 33½ to 34. The lode in the shaft is worth nearly 500*l.* per fathom, and is quite as valuable as at any former period. The sale of tin for the month is about 66 tons; this mine has now secured the most assured and permanent position of any mine in Cornwall, and with Clifford, West Chiverton, South Caradon, and Devon Great Consols, may be grouped as investments for safety and lucrativeness as second to none in the mining world. The market for mine shares would soon witness a revival if the public would confine their attention to such mines, rather than to doubtful speculations, in outlying regions known only to unknown promoters, who by their specious circulars entrap the unwary, and their shares having no market existence. The price charged for the trash is limited only by the cupidity of the vendor, or his faith in the gullibility and means of his victim. WEST CHIVERTON, 63 to 66. The lode in the 90 cross-cut is worth 70*l.* per fathom. The western part of the mine has improved, and the winzes, ends, &c., all fully maintain previous values. The sale of lead ore for the fortnight realised 1873*l.* 14*s.* Chiverton, 6 to 6¼, and safe to buy; Wentworth, 8 to 8¼. A good pile of lead ore is being raised from the eastern shaft, and shortly the lode will be cut at a deep level in the engine-shaft. These shares are a safe purchase. MINERAL BOTTOM, 5 to 5½, find ready purchasers. The engine is at work; the shaft down to the 30; and a cross-cut has been commenced to intersect the Wentworth lode. NORTH ROSKEAR at 15, and NORTH CROFTY at 1¾, deserve the attention of investors. GREAT LAXEY, 17⅛ to 18; the mine is looking quite as well as at any former period. FRONTINO AND BOLIVIA shares should be bought. Market changes otherwise unimportant.

From Mr. WILLIAM LELEAN:—The report still is that money is plentiful, the rate of interest being low, and the demand for discount by no means pressing. The gold flows pretty steadily into the Banks of England, France, and Holland, while the commerce of all these countries is in a very satisfactory condition. Nevertheless, the disposition to venture into enterprises of even an indisputably sound character is extremely moderate, not to say feeble, and the invitations to venture into new speculations, promising unheard-of advantages, are not responded to in a way likely to satisfy the anticipations of their ingenious and very sanguine promoters. There is nothing surprising in all this. It is, on the contrary, quite natural that such a reaction should follow the speculating mania of the year we have just left behind us. Some people have lost their money in unlucky ventures, others have locked theirs up in lucky ones, while many of those who were not tempted by either class of adventures, or who had then no money to spare, have not yet recovered from the effects produced on their minds by what they have heard or read of the ingenious methods for catching greenhorns who have money in their pockets, by those who profess to be able to make fortunes for everybody excepting themselves. In addition to these circumstances, the *Times* points to the fact of the fall that has taken place in the price of nearly every article of produce, so that the trading classes, instead of having a surplus for investment, are compelled in many cases to effect realisation; and, if we add to these causes the forcing of new schemes upon the public, and the appearance every now and then of a new foreign loan on the money market, we shall cease to wonder at the absence of all activity in the dealings with investments of even the soundest and most satisfactory description. To be impatient of this condition of things is as boobyish as it is bootless, and wishing for a great change in the public disposition, before the causes which induce its present condition are removed, is scarcely less so:—

> "Were I as plump as stall'd theology,
> Wishing would make me waste to thin shade again;
> Were I as wealthy as a South Sea dream,
> Wishing is an expedient to be poor—
> Wishing, that constant hectic of a fool,
> Caught at a court, purg'd off by purer air
> And simpler diet."

There is an old saw, that "when things come to the worst they must soon mend," but it is to be accepted, like many other old saws, with some reservation. When things reach the worst they cannot, of course, become worse; but it may be some time after the crisis has been reached before they exhibit symptoms of a decided improvement. We must be content, for a while then, to place before the but half-awakened, or but partially-aroused, portion of the public the openings that are offering themselves for successful enterprise—not in untried courses or questionable speculations, but in such as have been long and successfully tried, and found to be productive, and patiently wait for a return of that spirit of active adventure which is the soul of commerce and the source of national prosperity and wealth.

I perceive that more than one of the correspondents of the Journal are raising their voice against the disreputable practice of what is commonly called "bearing" the market—that is, depreciating the market price of shares, by propagating false reports of their condition or prospects, and thus alarming their holders into the selling at prices much below the real value, so that they may themselves profit by the loss. I can have no

hesitation in saying ditto to anything that may be said in reprobation of so disgraceful a means of robbery. It is very discreditable to all who resort to it, not only because it is cruel and unjust to those who immediately suffer by it, but because it operates as a great discouragement to the investing in mining property. It is but right to add, however, that those who are thus induced to sacrifice their shares, by pressing their sale at inadequate prices, are themselves greatly to blame for it. If a man's ears are open to every tale or rumour he may hear, and cares not to enquire from whom it comes, or on what foundation it rests, what right has he to expect that he shall escape mischief?—

"Should we, by too much confidence betray'd,
Fall a defenceless prey to villany,
What could be said for us?"

If persons would but exercise a little caution and judgment the "bears" would soon be brought to the stake, and the Share Market and its agents be relieved from the imputations which some who visit the sins of an intruder in the circle into which he sometimes unwelcomly thrusts himself unjustly put upon them.

When I last week referred to Capt. Seccombe's report on the MAUDLIN MINES, which I assumed would appear in the same Journal as my remarks, I had not seen it; but knowing what the condition of the mine was, from an inspection I had had made of it, and knowing also Capt. Seccombe's great and just reputation for both judgment and integrity, I knew I could not be far out in the estimate I formed of what his report would be, when I heard that he had made one. I was not wrong. The report is evidently written with great caution, and with a determination to give no false colouring or effect to its statements; but it confirms, in every particular, what I had myself previously stated, upon the authority to which I have already referred. It is to be regretted that Capt. Seccombe's report was preceded in the Journal by that of Capt. Tregay, which was not written till five days afterwards. Had they been reversed in their order they would have been more intelligible, and the progress of discovery in the east mine would have been more apparent. Comparing Capt. Tregay's report of last week with the one which will, I suppose, appear in this day's Journal, it will be seen that the mine continues to become more and more satisfactory, for while the lode in the back of the 70 fm. level east continues to be worth 60*l.* per fm., the lode in the rise, back of the 70 west, to which they could last week give no value, is now about 2½ ft. wide, and is worth 20*l.* per fm. There are also very satisfactory reports of the EAST TRESKERBY and the EAST LAXEY, in both of which they appear to be on the eve of making some valuable discoveries, while all the formerly-noticed points continue at least as good as they were, and some of them report still better. The NEW CLIFFORD may be added to those mines which are opening up in a most satisfactory manner. In driving a shallow adit still further north than they found it they cut Gooley's lode, which is 12 ft. wide, composed of very rich gossan, mundic, black copper ore, and splendid stones of tin, and so near to surface, holds out considerable promise to the holders of shares of a lasting course of copper ore, at a very shallow depth. At the GREAT SOUTH CHIVERTON all the works are being pushed on vigorously and well, and in other respects there is no falling off.

FOREIGN MINES.

EAST DEL REY.—W. Treloar, Dec. 30: Morro Sao Vicente: Having succeeded in putting in the necessary timber and mason work for securing the mine from the entrance to Bernardo's workings, we shall resume operations on the lode at various points on Monday next. At Bernardo's workings we shall endeavour to remove sufficient of the debris to enable us to put in a couple or three stull pieces more, that we may obtain as great an extent upon the lode at this point as possible. We shall then proceed to sink on the lode, and open a communication with the workings underneath, allowing an arch of ground to stand as a support for the hanging wall. When this communication is effected, and a thoroughfare opened to a new level about to be commenced 10 fms. lower down the excavation, designated No. 3 level west, it will not only improve the ventilation at the bottom of the mine, but afford greater facilities for working upon the lode. The adit level progresses favourably; we are hastening on this level with all dispatch, in order to intersect the lode. The main watercourse has been cleaned and repaired. The force are employed in cleaning an old watercourse for bringing the Morro das Almas water on the mine, which I hope will soon be required to enable us to open eastward of our present works. The water is again in fork to the bottom, and the timber-work is so far advanced that we hope soon to resume operations. Capao Mine: The last month's produce from this mine has been low, owing to the scarcity of water, and to the small quantity of ore stamped from Henderson's shaft; but now the alteration in the pitwork is compiete, the shaft cased down, and the penthouse put in, the sinking of the shaft will proceed more regularly, and a greater supply of the ore from this point will be obtained for the stamps.—Western Stopes: The lode here has presented but little alteration calling for remark; if anything, it is not quite so wide, but the ore still presents a good appearance. The whim-shaft has been sunk to the shallow adit level, at which point a few pieces of timber are required to support some hanging ground before making an opening for the shaft through the stull. The whim round for the above shaft, and a piece of road for carts bringing timber on the mine, are finished. The stands and launders for conveying water across the valley from the Emily to Addis' stamps will, I hope, also be completed in about another month. The Emily stamps have been taken to pieces, and the tramroads taken up, and these, with the materials, are being removed to the company's other mines. Captain Treloar has forwarded by the present mail a small remittance, amounting to 2226 oits., which, he says, would have been considerably larger had it not been for the late accident at the Morro Sao Vicente Mine, and the scarcity of water at Capao, prior to the commencement of the rainy season.

SANTA BARBARA GOLD.—Capt. Bryant, Pari, Dec. 28: I beg to advise you we forwarded from this mine on the 25th inst. 6820 oits., or 790 ozs. 12 dwts. 8 grs. of amalgamated gold. I had hoped to have sent 7000 oits., and should have been able to do so had the refuse and the sand been treated. From Nov. 20 to Dec. 20 there was stamped—from No. 1 shaft and bottoms 284 tons; produce, 983 oits. = 3·46 oits. per ton; from No. 2 south bottoms 336 tons; produce, 1249 oits. = 3·50 oits. per ton. The stone from each part was kept separate, and amalgamated separately, so that the produce of stone is correct, irrespective of the refuse stone and sand.

THE SILVER MINING COMPANY OF NORWAY.—J. Th. Rordam, Jan. 16: The silver brought to the Kongsberg smelting-house has been refined; the produce is 35 marcs of fine silver. The Norwegian Bank pays at present Sp. 9·18 per marc. I beg to inform you that, according to preparatory trial at the assay-office at Kongsberg, the silver contains 2½ lod, or ⅛ per cent. of gold. This is important for the prospects of the mines. At the gold extracting establishment in Germany, &c., the gold is paying when but one-tenth per cent. of the silver. The silver from your mines refined in 1863 did also contain gold, but less than at present—about ¾ bar of 34 marcs, or one-seventh to one-eighth per cent. It is possible that the contents of gold in our silver differs at certain of the points where the silver is produced.

RHENISH CONSOLS.—G. Sweet, Feb. 3: Bliebach: We are pushing on the cross-cut as fast as possible from the bottom of Astley's shaft towards the good bunch of lead gone down in the adit level, and we are expecting to see the sink drained before the end of the present month. The plat is finished at the 10 lachter level, at Wright's shaft, and would have been completed a week since had it not been for the breaking of the crank to the wheel. We shall now extend on the lode intersected in the plat, and cross-cut towards the north lode. The lode in the plat is of a very promising description, being 1¼ ft. wide, and producing fine stones of lead ore; this may prove to be the main lode south of the shaft, thrown a little north by its passing from the killas into the limestone. Between the killas and sandstone there is almost a flat kluff, and it may prove that this kluff has thrown the lode as before stated. The lode in the end driving west from Wright's is still very regular, and producing from 12 to 15 centners of lead ore per lachter, with more blende than there has been; it is necessary that this end should be pushed forward, but we can be laying open but very little stoping ground, as the end is not above 7 lachters below the surface. The higher we rise in the stopes the more gossan we find in the lode, which is not so good for lead. We are pushing down the winze as fast as possible, but have not taken up any lode this last week. We have now plenty of water, and the wheels are working well.—James Watt: The lode in the end driving west has greatly improved, being now much better than I have seen it since its intersection. The lead is of a fine quality, and almost destitute of mundic. The eastern end is at present poor. We have set two stopes in the back—one to the east and the other to the west of the cross-cut. The engine works well.—Fahrenberg: The stopes in the back, on the new lode, are poor, but in cross-cutting the south side of the level we have found a good branch of lead, being a part of the lode, and running almost parallel with the main lode. I intend to set two pitches to-morrow, if possible, on tribute. We shall have to sell in a fortnight about 15 tons of lead ore, and the total cost for January is about 1500 thalers. There are now at the James Watt about 10 tons of lead, and 5 tons of blende, not clean.

LUSITANIAN.—Feb. 1: Taylor's engine-shaft is full of water to the 70 fm. level. The lode in the 90, east of Taylor's, when last seen, was worth 1¼ ton per fathom. In the 90, west of Taylor's, the lode, when last seen, was worth 1 ton per fathom. The lode in the 80, east of Taylor's, is small and unproductive. In the 70, east of River shaft, the lode is 5 ft. wide, composed of quartz and a branch of ore, worth ¾ ton per fathom. In the 70, west of Taylor's, the lode is 1 ft. wide, composed of quartz, flookan, and stones of ore. The lode in the 60, west of slide lode, is split into branches, some of which have spots of lead and copper. In the 60 cross-cut, north of River shaft, the ground is still hard, but a little more favourable than when last reported on. The lode in the 58, west of Perez' shaft, is 9 in. wide, yielding stones of ore. In Perez' shaft, the lode is 1 ft. wide, producing stones of ore. The lode in the 28, west of Perez' shaft, is composed of quartz and occasional stones of ore. The lode in Campion's winze, below the 60, is 1¼ ft. wide, composed of flookan. The ground in the 28 cross-cut, north of Perez' shaft, is exceedingly hard. In the 28 cross-cut, south of Slide lode, the ground is also hard for driving. The lode in the 50, west of Slide lode, on Mill lode, is only seen in small strings. In Pedro's winze, below the 60, the lode is 2 ft. wide, worth ¾ ton per fm. The lode in the 50, west of Oak shaft (great caunter lode), is composed of quarts, spotted with lead and copper.—Stopes on Basto's Lode: The stopes above the 8, west of Perez' shaft, are worth ¾ ton per fathom. The stopes above the 60, east and west of River shaft, are worth 1 ton per fathom. The stopes above the 60 west of Joaquin's winze, are worth 1 ton per fathom. The stopes above the 70, between Taylor's and River shafts, are worth 1¼ ton per fathom. The stopes above the 80, west of Taylor's, when last seen, were worth 3 tons per fathom. The stopes above the 50, east and west of Norte's winze, are worth 1¼ ton per fathom. The stopes above the 70, east and west of Nunez' winze, are worth 1 ton per fathom. The stopes above the 50, between Caunter and Slide lodes, are worth ⅛ ton per fathom. The stopes above the 50, by Machado's winze, are worth 1 ton per fathom. The stopes above the 60, by Jacintro's winze, are worth ¾ ton per fathom.—Stopes on Great Caunter Lode: The stopes above the 40, west of Oak shaft, are worth 1¼ ton per fathom.—South Lode: The lode in the 50, east of caunter lode, is composed of quartz and copper ore, worth for the latter 1¼ ton per fathom.—Carvalhal Mine: We are stoping down the west end of incline shaft, below the 10 fm. level, where the lode is 1½ ft. wide, composed of quartz, mundic, and spots of lead ore.

FORTUNA.—Canada Incosa—West of Taylor's Engine-shaft: The lode in the 100, west of O'Shea's shaft, is large, containing good stones of lead. In the 90, west of Zamora's winze, the lode is wide and strong, chiefly composed of carbonate of lime and lead, worth for the latter 1 ton per fm. The lode in the 80, west of Henty's shaft, continues small, and the ground hard for driving. In the upper part of the 70, west of Judd's shaft, the lode is very productive, but it fails in the bottom.—East of Engine-shaft: The lode in the 70, west of Grande's winze, is getting regular, and consists of quartz, calcareous spar, and lead. The 70, east of Gerona's winze, is opening moderately productive ground, worth 1 ton per fm. The lode in the 45, east of Damian's winze, is very irregular, and hard for driving. In the 30, east of Garcia's winze, the lode is very compact, worth 1 ton per fm.—Shafts and Winzes: At Henty's shaft the lode is strong, and spotted with lead—the ground is getting very hard for driving. Kennedy's shaft is going down in a very promising lode, worth 1¼ ton per fm. The lode in Clavel sump-winze is divided into several parts or branches. In Nunes's winze the lode is small and compact. Solina's winze is rather falling off in value. The water in Sancho's winze has greatly increased, which renders sinking very difficult.—Los Salidos Mine: The elvan course in the 90, west of Andre's widze, is very strong and hard for driving. The lode in the 75, west of Gimine's winze, is split into branches, and quite unproductive. The lode in the 75, west of Saez' winze, is wide and rich in the bottom of the end, worth 2 tons per fm. In the 55, west of San Carlos shaft, the lode is compact and firm, and opening good tribute ground, worth 2 tons per fm. The lode in the 45, west of Millan's winze is disarranged and unproductive.—East of Engine-shaft: In the 90, east of Pintado's winze, the lode has improved, but it is still very hard for driving. The lode in the 75, east of Cologan's shaft, is small and unproductive. In the 65, east of Miguel's winze, there are two strong branches, but they have undergone an unfavourable change in the last few days.—Shafts and Winzes: Castillas winze is going down in a compact and productive lode, worth 1¼ ton per fm. Roque's winze is holed to the 45; the lode has been small and poor for some time past. The lode in Bartolo's winze is small and compact, consisting of carbonate of lime and lead ore, worth for the latter 1 ton per fm. In Juare's winze the lode is chiefly composed of calcareous spar and lead ore, worth for the latter ¾ ton per fathom.

LINARES.—Jan. 28: South Lode—West of Engine-shaft: The lode in the 110, west of No. 138 winze, is improving, and the upper part of the end contains good stones of lead. The 95, west of No. 136 winze, is suspended. The lode in the 61, west of Santana's winze, is worth 2½ tons per fathom, but not so productive as it was, and is getting very hard for driving. In the 51, west of Crosby's shaft, the lode has fallen off in value.—East of Engine-shaft: In the 110, east of engine-shaft, the lode is small, and the ground very hard for driving. The lode in the 95, east of No. 135 winze, continues very large, chiefly composed of carbonate of lime and lead, but not enough of the latter to value. The 85, east of No. 134 winze, has been unproductive for a considerable length of driving, and is, therefore, suspended. The lode in the 75, east of No. 144 winze, is large, consisting of decomposed granite, gossan, carbonate of lime, and lead. The 75, west of San Jose shaft, is very similar to the last described, and to which it will be holed very shortly.—North Lode: The lode in the 85, east of No. 132 winze, is very regular, and contains good stones of lead, but not enough to value.—Shafts and Winzes: Crosby's shaft will be completed to the 61 fathom level in a few days. The ground in Santa Toma's shaft is hard for sinking. In No. 145 winze the lode is large, and chiefly composed of calcareous spar, spotted with lead. No. 144 winze will be holed to the 95 in a few days.—General Remarks: There has not been any unusual change in the tribute department during the past month. The ground at Warne's mine is yielding very well. We estimate the raisings for February at 350 tons.

ALAMILLOS.—Jan. 28: The lode in the fourth level, east of San Juan shaft, is still small. In the third level, west of San Martin shaft, the lode is large and strong, but does not contain lead enough to value. The lode in the second level, east of Taylor's engine-shaft, is large, strong, and productive, chiefly composed of carbonate of lime and lead ore, worth for the latter 2½ tons per fm. The second level, west of same shaft, is holed to the end driven east from Navara's winze; it has opened a very valuable piece of ground, worth 2 tons per fm. In the second level, east of San Adriano shaft, the lode is very wide, and of a promising appearance, but not so productive as it was; worth 1 ton per fm. The second level, west of Magdalena shaft, is now in sound ground; the lode varies considerably, and has fallen off in value during the last few days. The second level, east of Magdalena shaft, is very rich in the bottom, worth 6 tons per fm., while in the upper part the lode is rather small. The lode in the first level, east of San Adriano shaft, is small, but in some parts of last month the driving was worth 1½ ton per fathom. The lode in the first level, west of same shaft, is small, and the ground easy for driving. In the forebreast of the first level, west of Crosby's shaft, now being stoped, the lode is of a kindly appearance, and some of the ground in the back is worth 4 tons per fm. In the first level, east of same shaft, the lode is small, but improving in appearance. The lode in the first level, west of San Enrique shaft, has fallen off in value of late, and will be suspended for the present. We have commenced to drive the third level, east and west of Taylor's shaft; the lode is large and strong, and spotted with lead.—Shafts and Winzes: Taylor's engine-shaft has reached the necessary depth for the third level. San Rafael shaft will reach the required depth below the fourth level for the cistern and bearers this month, when the plunger will be fixed. Crosby's shaft is going down in a productive lode, worth 2 tons per fm. There appears to be a strong cross-course in San Jose shaft, which has disarranged the lode. San Francisco shaft, has been sunk through a fine lode, until two days ago worth 1¼ ton per fm., when it changed unfavourably. The men in San Eugenio shaft are cross-cutting north from the bottom, and we expect to reach the lode shortly. In the San Enrique shaft the men are progressing favourably. San Yago and Cologan's shafts are being cleared and cut doown the proper size for a good whim-shaft. Esteban's winze is in the strong slide, and the men are put to open the north side, where, in all probability, the lode will be found.—General Remarks: The surface work is progressing favourably. Our monthly setting passed off very well; nearly all the bargains were re-taken, at comparatively low prices. We shall set on some good stopes in the back of the second level, between Taylor's shaft and Navarra's winze, in the course of a few days, and raise for February 160 tons.—Jan. 30: We have begun to drive the second level west of San Adriano shaft, and, according to the appearance of the lode, which is worth 2 tons per fm., we shall open good ground. In the second level, west of Navarro's winze, the lode is large, open, and of a most encouraging appearance, being worth 3 tons per fm. We have cleared through the old workings in the first level, west of San Francsico shaft, and have commenced driving where we found a rich and compact lode, worth 2½ tons per fm. We have also begun to drive the first level east of the sams shaft; the lode is very kindly, easy for opening, and worth 1¼ ton per fm.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

GOLD IN WALES.—Castell Carn Dochan Gold Mine returned for the week ending Feb. 7, 6 ozs. 8 dwts. from 22 cwts. of lode stuff, making a total of 161 ozs. 13½ dwts. from 33 tons 14 cwts.

UNITED DOLFRWYNOGS.—There is every probability of a good quantity of copper here.

NEW LOVELL.—The lode in the engine-shaft, sinking below the 20, has greatly improved in size and value. In sinking this shaft about 9 feet more the tin dropper to the north will form a junction with the lode, where we may reasonably expect a rich discovery of tin. The lode in the 20 fm. level end west has also improved, and opening out remarkably well. As the operations progress there appears no doubt, from the rich courses of tin seen in the bottom of the adit level, that a few fathoms drivage will open up an extensive run of rich tin ground. The lode in the 20 fm. level end east is of a very promising character; in extending this end about 6 fms. east it will form a junction with the caunter lode. Expectations are very sanguine as to the result. The prospects here are considerably improved, and the mine generally is looking far better than could have been anticipated; and, from the discoveries recently made, a few months will place this mine in a paying and permanent position.

GREAT SOUTH TOLGUS has again become in great favour, not from market operations alone, but from its own merits as a pure legitimate speculation. The new discovery at the 154 has averaged since it was struck from 6 to 7 tons of copper ore per fathom, and, as will be seen from the sale at Redruth on Thursday, is worth over 10*l.* per ton. Should the important discovery continue (which the present prospects in every way indicate) shares must ere long see a high figure.

WHEAL TRANNACK.—Since the last meeting the lode in the 40, going east, is much improved to-day; the lode is 5 or 6 inches wide, producing good work for copper ore, both grey and black, and likely to improve, as it is nearly under the branch of grey ore found in the 20 fm. level.

WHEAL GRYLLS.—This mine is again improving, and it is expected that the Georgia lode will now resume its former productiveness. It may be remembered that from this portion of the sett large profits were realised. The machinery and plant must be worth three times the present price of the shares.

MULBERRY (Tin).—This mine is situated at Mulberry Hill, in the parish of Lanivet. So immense a quantity of tinstuff laid open at surface can be seen scarcely anywhere else. The shallow adit has laid open no less than 10,000,000 tons of lode stuff, without any machinery whatever, and by driving a short cross-cut they will have 100,000,000 tons to take away. Half way down the hill is a small steam-engine, with 40 heads of stamps, from which the last return of tin was, I believe, 11 tons; and by increasing the number of heads almost any quantity might be returned. If the merits of the mine were made known, and ample capital obtained for working it, advantage to all parties would result. The lode is over 100 ft. wide.

GREAT SOUTH CHIVERTON is opening out exceedingly well, and from the indications in the west end of the adit, now in a light blue killas, there is every probability that a good discovery will be made in a few weeks. This character of stratum has always made large deposits of lead in depth in the neighbouring mines; for instance, East Wheal Rose, which gave immense profits to the shareholders. The agents are very sanguine about cutting lead almost immediately, both in the east and west ends of the adit, so that the fortunate proprietors have every prospect of a speedy rise in the shares, as well as being further convinced of its intrinsic value. The various agents who reported on it previous to the commencement of operations stated as their opinion that lead would be found at a shallow depth; this is now likely to be verified. Everything is pushed on as fast as possible, with the greatest economy.

From TRELOWETH Capt. T. Richards, under date Feb. 9, writes that the stopes continue to produce the usual quantity or ore. The report was received too late for insertion.

NEW CLIFFORD.—The progress since the commencement of operations has resulted in proving that the agents, upon whose reports the present company were induced to embark in the adventure, were fully justified in their anticipations of future success. In driving a shallow adit for the purpose of draining the surface water from the shaft, the main, or Gooley's lode, was intersected, and found to be of great width, composed of numerous branches, highly mineralised, and estimated to be worth 30*l.* per fathom.

CRIDDIS (Padstow).—A 40-inch cylinder steam-engine was set to work a few days since at this mine, under the personal superintendence of Mr. David Stickland, the engineer and local managing director. The engine-house was built, and the engine purchased and erected, since October last. The company, being a first-class one, gave all the men a dinner, and Mr. D. Stickland invited some of his friends to see the engine set in motion, who afterwards dined together at Mr. Rowling's Hotel, Padstow. Upon word being given, the steam was turned on, and the machinery was instantly in motion, amidst a large number of spectators, who assembled to witness an event of such great importance to those in the district, the good of which must naturally benefit them and the community at large. The engine worked beautifully, and continued to pump the water with the greatest ease, and without the slightest delay; and every part of the engine appeared to be quite perfect. It is a second-hand engine, and was made some years since by Messrs. Oatey and Sons, Wadebridge, and has only worked about 20 months since new; in fact, it looks equal to new, and great credit is due to the engineer for the manner in which it is put together. There are few mining properties in Cornwall or Devon which present so many favourable features of permanent value as the Criddis Copper Mine, and fewer still which give such indications of early returns. From information obtained, there is little doubt that there will be large quantities of copper ore of good quality returned as soon as the mine is drained; in fact, there is splendid work coming up, for anyone to see for himself.

BAL MYNHEER, in Wendron, is only opened to a depth of 10 fathoms, yet a large deposit of tin, 30 fms. long and 50 ft. wide, has been discovered.

THE TIN TRADE.—During the last 15 years the average price of tin has been about 70*l.*; the lowest price 50*l.* 2s. 6d., and the highest 88*l.* 10s. The present price is 54*l.*

LEAD MINER BLOWN TO PIECES.—A sad occurrence has just taken place at the Wester Hall Lead Mines, by which a poor fellow was literally blown to pieces. A sinker, named Ralph Brown, was engaged in blasting at the bottom of the shaft, and one of the shots he had "set" failed to explode. After a few minutes had elapsed he descended the shaft again, and examined the place where the shot had been set. While thus engaged the shot fired, and the consequence was that he was almost blown to pieces.

We understand that the whole of the collieries and works of the late Lady Londonderry will be carried on by Earl Vane.—*Durham Advertiser.*

Some quarrymen working at Wear Gifford Quarry, while breaking a large mass of stone, found within it the body of an immense rat, of great length from snout to tail, with whiskers six inches long. It is to be offered to the British Museum.

TREATING PEAT.—Mr. J. W. Horsfall proposes to obtain an improved fuel by saturating air-dried peat with gas tar or petroleum, and so evaporating the water in the presence of steam as to leave the volatile products unevaporated—a process far more easily described than understood.—H. J. E.

Mining Correspondence.

BRITISH MINES.

BEDFORD CONSOLS.—J. Mitchell, Feb. 10: On Saturday last the cross-cuts were set to drive north and south in the middle adit level, by six men, at 9*l.* per fathom, stented the month, or cut the elvan or lode. The north cross-cut is at present wet, and spare for driving. The ground in the cross-cut south, and south of the branch referred to in last report, has again become hard, consequently our progress at this point is not so good; I hope, however, to see it change for the better shortly.

BEDFORD UNITED.—Jas. Phillips, Feb. 8: The stope in the back of the 130 west will produce 3 tons of ore per fathom. The four stopes in the back of the 115 west produce on an average 3 tons each of ore per fathom. There has been no lode taken down in the 103 west; there are three stopes in the back of this level, two of which produce 3 tons each of ore per fathom, and one 2 tons of ore per fathom. The stope in the back of the 90 west will produce 2½ tons of ore per fathom. The south lode in the 80, west of the cross-cut, is 2 feet wide, producing good stones of ore, and kindly to improve. In the 70 cross-cut north the lode has not yet been cut. The stope in the back of the 70 east is worth 2½ tons of ore per fathom. In the 58 east the lode is from 18 in. to 2 feet wide, composed of capel and spar, with spots of ore. The stope in this level produces 2 tons, and the stope in the 47 east 2½ tons of ore per fathom. The ground in the north engine-shaft has been hard and troublesome for some days past, consequently the progress is slow. The shaft is still sinking behind the lode. The lode in the 62 east is 2 ft. wide, yielding good stones of ore occasionally.

BEDOL-AUR.—Feb. 8: The end driving east on the Golden Shoe lode has improved a little in value since my last, and is now worth 3 cwts. per fm. The ground here is favourable for driving. We calculate, in driving 14 yards more, to intersect a north and south lode, running parallel with the Brynia lode. The stope on St. Vincent lode is yielding but little lead, but from the nature of the ground we think it likely to improve daily. The end driving north on same lode is better than it has been for some time past, yielding some good stones of ore. I think we have cut the Golden Shoe lode in this end, but cannot say positively for a day or two. The stope driving north of winze is without alteration, but still producing occasional stones of lead. We purpose sinking a new shaft from surface the beginning of next month, to intersect the Golden Shoe and the Brynia lodes at the 70, as this is the best time in the whole year, and being sadly in need of a shaft, besides laying open new ground and proving the lode.

BOSCAWEN.—R. Giles, Feb. 4: The driving of the 80, west of Hunter's, is still hard, and lode unproductive. The lode in the 80, driving east of sump-winze, is 2½ ft. wide, worth 15*l.* per fathom for copper ore. The lode in the 80, driving west of said winze, is 15 in. wide, producing good stones of copper ore, of a very promising appearance, and I expect in the coming week will be of value. The lode in the stope in bottom of the 70, east of sump-winze, is worth 16*l.* per fm. The lode in back of the 70, west of Hunter's shaft, is worth 16*l.* per fm. for copper ore. The lode in the 40, driving west of Hunter's, is worth 8*l.* per fathom for copper ore. The lode in the 30, east of caunter shaft, is dis-ordered at present by a small cross-course. Parry's shaft is sunk to the deep adit level, and plat cut. We have commenced to drive west to communicate with the level driving east from Hallenbeagle, as we are unable to sink the shaft in consequence of an increase of water, occasioned by the heavy falls of rain.

BOTTLE HILL.—J. Eddy, Feb. 8: The lode in the 12, driving east, and the different stopes throughout the mine are producing about the same quality tinstuff as when reported on last week. I hope to send off samples for our next parcel of tin the latter part of this week. The quantity will be from 6½ to 7 tons.

BRONFLOYD.—T. Kemp, Feb. 8: The lode in the stopes in back of the 52 is looking well, and yielding 3 tons of lead ore per fm., while that in the bottom of the 40 still produces 1½ ton per fm. A tribute pitch has been set at the back of the 40, to 10 men, at 7*l.* 10s. per ton of clean ore; the takers to pay all cost. We sampled on Monday 50 tons of lead ore, for sale on the 16th inst.

BRYN GWIOG.—F. Evans, Feb. 8: The lode in the 102 east is small and poor, and the ground hard for driving; we shall put up a rise in the back of this level soon, to meet a winze sinking below the 90, and which produces 2 tons per fathom. In the 90 west the lode is 1 ft. wide, composed of spar, blende, and lead ore, worth 8 cwts. of the latter per fathom. A pitch behind this end is worth 12 cwts. per fathom. In the rise at the forebreast of the 90 east the lode is 1 ft. wide, worth ½ ton per fathom; the ground is hard for rising. A pitch west of this rise will yield 15 cwts. per fathom. A pitch in the bottom of this level will produce 1½ ton per fathom. A pitch in the back of the 75 west, 30 fms. from shaft, is worth 15 cwts. per fathom. A pitch below the 75 east, in the run, will produce 2 tons per fathom. The 75 east is still in shale, and poor. A pitch in the back of the 66, on flat, will produce 30 cwts. per fathom. There is no other change to notice. We have sampled for this week's sale 40 tons of lead.

BRYNTAIL.—Jas. Roach, Feb. 9: The mine has been thoroughly drained of water. No fall of ground of importance had taken place, merely a few scales here and there; the debris from these has been removed, and operations commenced in the 30, east and west of shaft. There is no material alteration in the former, but in the latter good stones of ore are being got. Had not the frost impeded our progress so much this winter, I believe we should have driven into a good course of ore ere this. From this time forward, no doubt, the usual drivage in these levels will be accomplished, and satisfactory results soon obtained. The 20 east will be resumed in two or three days.

CAPE CORNWALL.—R. P. Goldsworthy, Feb. 8: We commenced to discharge the tinstuff from the tributers on Saturday last. I have the pleasure to inform you that the first skip contained splendid rocks of tin; we have now at the surface several parcels of good quality tinstuff. On the average our pitches are looking well; we have two men stoping in back of the 55 fm. level, at 42s. per fathom; the lode is 3 ft. wide, producing stamping work. Three men taking down the lode in the 70 fm. level east, where we hope to meet with the same run of tin ground we have in the 55 fathom level.

CARADON CONSOLS.—W. Rich, Feb. 7: We are forcing on the cross-cut south by six men. As usual, the ground is easy for working, but no lode yet intersected.

CARN CAMBORNE.—J. Seccombe, Feb. 6: Fair progress is being made in sinking the engine-shaft below the 40, and driving the cross-cut north at that level. The south lode, in the 40 east, is yielding ½ ton of ore per fm.; west at this level it is worth 3 tons. In the 30 east the lode is producing ½ ton per fm., and west 2 tons. In the midway level east and west the lode is producing stones of ore. Clarke's lode, in the 13 west, is yielding 1 ton of ore per fm.

CASTELL CARN DOCHAN (Gold).—J. Parry, Feb. 8: The lode in the south-west stope has yielded during the week several specimens carrying visible gold. As anticipated in last week's report, we have seen this week some nice specks of gold in the stope north-east end of shaft. The lode in the south-west driving of No. 1 level continues much the same—rather disordered. The weather is fine at present, so the carpenters are busy preparing for the fixing of the large water-wheel. Frames and bolts have arrived from the foundry. The Mosheimer pan has commenced on the re-working of the tailings that have passed through the Britten's machines. The latter, and the works generally, are now going on satisfactorily. The late severe frost has stopped amalgamation.

— J. Parry, Feb. 9: Since my last we have been able to tap the Britten's machines. The produce of gold is 6 ozs. 8 dwts., from 22 cwts. of lode stuff.

CEFN BRWYNO.—Feb. 7: Nothing has been done in the 92 fm. level since my last report, in consequence of the water being in by means of the frost, and it will not be out again till the latter part of this week. The lode in the 80, west of shaft, is 3 feet wide, yielding 10 cwts. of lead ore per fathom. The lode in the same level, going east of shaft, is 2 ft. wide, containing a little ore, but not to value at present. The three stopes over this level are yielding on an average 10 cwts. of lead ore per fathom. The lode in the 56 or deep adit, east of shaft, is 3 ft. wide, yielding good stones of lead ore at times, but not quite so good as of late. We sampled 40 tons of good quality ore from this mine on Tuesday last.

CEFN CILCEN—(*Special Report*).—T. Hughes, Feb. 9: Susan's Shaft: The shaft is 100 yards deep, and sunk on the course of the lode, from which levels have been extended east and west, and from which large returns were made. The present operations are confined to driving the 80 yard level east, not only to prove the richness of it, but to intersect a north and south lode, which is now only a few yards in advance of the end. The lode in the level, until within the last few yards, has been very much disordered and poor, but indications are now more favourable; the lode is from 1½ to 2 ft. wide, composed of carbonate of lime, intermixed with a little lead. From appearances, great hopes may be entertained of discovering lead upon intersecting the lode above mentioned.—Engine-shaft: This shaft has been sunk to the 120 yard level, and extensive explorations have been made, resulting in returning large quantities of lead, but at present operations have been suspended, in consequence of the unfavourable season of the year.—Office-shaft: This shaft is sunk 40 yards on the course of the lode, and levels extended east and west, which have produced a little lead. In the 40 yard level the lode is 2 ft. wide, composed of carbonate of lime and lead, of a very promising appearance. A cross-cut has been commenced to drive north from this level to intersect a parallel lode, which is now within 5 yards of cutting it; large returns of lead have been made from this lode at shallow levels, and there is every prospect to anticipate like results when the lode is intersected at this point. There are two pitches at work, one in the footway shaft, and the other in the horse and pulley shaft, which yield lead in paying quantities. There are others that could be mentioned and highly recommended, but the above are first in importance. The dressing is being carried on, and in a short time there will be a parcel of lead ready for sale.

CENTRAL MINERA.—Feb. 9: The western shaft is now 9 yards below the 40; the ground is of the same favourable character as last week, and good progress is being made.—Edgworth's Shaft: The pitch in back of the 50 yard level has a little improved, now worth 12 cwts. per fm.

CLARA UNITED.—J. Lester, Feb. 8: Llywernog: The lode west of shaft in the 50 continues to be worth 1 ton of lead and 1 ton of blende ores per fathom, and is fully as wide as the level. We are not yet through the disordered ground met with in the eastern level, but as I consider this cross-course has heaved the lode to the south, we are cross-cutting on that side of the level to prove it. At Dolwen the discovery reported last week continues to hold good; the lode so far contains a good mixture of lead ore, and worth ⅛ ton per fm. We have about 8 fathoms to drive to meet the end opened east from bottom of the engine-shaft.

CLEVELAND IRON.—T. Watson: We are now on a band of ironstone in the sump under the pump; to-morrow will show us if it is the main band or not. It is quite due according to the measurement from Codhill works, &c., but it is not uncommon to find a considerable difference in the thickness of the stratum between the jet rock and the ironstone band.

COOLARTRA AND BOND.—W. H. Rowe, Feb. 3: The 36 is now driven southward on the footwall part of the lode 8 fathoms, the point I calculated from the average dip of the ore ground, or workings above, at which we ought to enter the shoot of ore crossing the shaft below the 25 fm. level; and from the appearances of the end just now this may turn out very nearly correct, as there appears to be a change of ground coming in, with a strong feeder of water issuing from the fissure near the sole, which, together with a nice bunch of black jack, indicate, to say the least, that we are now within a very short distance of the run of ground referred to. In the cross-cut, driving east from the forehead of the 20 fm. level south, we have also cut a very strong feeder of water, which seems to support the opinion I hold of their having lost the lode at this point; about 7 fathoms further driving will satisfactorily prove this question. The tributers and labourers have a kindly-looking rib of ore in the sole of the 25, but still irregular, and the yield uncertain. There are 4 tons of lead on the washing-floors and in store.

CORNUBIA TIN.—T. Parkyn, J. King, Feb. 9: We beg to inform you that everything is going on well; we are at this moment engaged in bagging up the tin for market, and have raised the full quantity we promised you—indeed, if the calcining-house had been finished a week ago, as we hoped when we commenced building, we should have been over a good bit; but, owing to the severe frost and snow, the masons could not do anything for a fortnight, and the house is only finished this day, consequently we shall not be able to return the mundic tin this time; we have it on the floors, but we have to sell this time, independent of the burning-house tin, a considerable quantity over last month's sales. All our stopes are looking well, both in the mundic ground and those stopes that are free from mundic. The new south lode, in the 60, is still looking well; here we have one stope, and are driving east on the lode; we consider this lode to be one of the best in the mine; it is our letting-day on Saturday next; we will advise you fully next week.

CRENVER AND WHEAL ABRAHAM.—J. Vivian, Feb. 9: I am happy to say we have repaired the water course, which broke into our mines last Sunday night week; this did not prove so serious as was at first expected, and the water only rose about 7 fms.; all, however, has now been made secure, and the water is being rapidly pumped out again. The continued heavy rains have been much against us in draining these ex-

tensive mines, and has retarded our surface operations. Yet we are making rapid progress. We shall start our No. 1 steam-capstan on Saturday, and during the coming week we shall start our second steam-capstan, and we hope in the week following to commence pumping with our 90-inch cylinder-engine, which will enable us to drain twice as fast as at present. We have now eight men raising copper ore on tribute in the 12 and 18, and continue to raise copper ore of excellent quality. This number will be shortly increased, another pare having gone underground to-day. Our 80-in. cylinder-engine continues to work in the most satisfactory manner.

CROWAN CONSOLS.—J. Vivian, Feb. 6: On Saturday we set the engine-shaft to sink under the 30, with six men, at 14*l.* per fm.; now down 1 fm. 5 ft. 8 in. The 30 east, on Dumpling lode, with two men, at 4*l.* 10s. per fm.; lode 2 ft. wide, composed of spar and blende. The 30 west, on Dumpling lode, with four men, at 2*l.* 15s. per fm.; lode 3 ft. 6 in. wide, composed of spar, blende, mundic, and stones of copper ore—a kindly lode. The 20 west, on Dumpling lode, with two men, at 1*l.* 10s. per fathom; lode 3 ft. wide, composed chiefly of spar and stones of copper ore. The 20 cross-cut north, towards Curtis lode, with two men, at 3*l.* 10s. per fm.

CWM ERFIN.—Feb. 7: The lode in the 20, east of the boundary, is 3 ft. wide, composed of clay-slate, branches of spar, and spots of mundic. The lode in the different stopes over the back of this level will turn out on an average from 12 to 15 cwts. of lead ore per fm. The lode in the 10, going east of the boundary, has split into two branches; we are continuing the level on the south part, which looks most promising of the two, and answers more to the right bearing of the lode; the part being carried is 1 ft. wide, unproductive. A new rise has been set in the back of this level, within about 7 fms. of the present end, in which the lode is 5 ft. wide, and worth 1 ton of lead ore per fathom. The lode in the stopes over the back of this level will yield on an average from ¾ to 1 ton of lead ore per fm. The lode in the deep adit level, east of the boundary, is all the breadth of the end, composed of clay-slate, branches of spar, and veins of lead ore, but not to value. The lode in the stopes over the back of this level is worth 25 cwts. of lead ore per fm. The lode in the 10, west of the engine-shaft, is 2 ft. wide, composed of clay-slate, decomposed quartz, and spots of mundic—looking promising. The lode in the new shallow adit level, east of the cross-cut, is 2½ ft. wide, worth 2 tons of lead ore per fm. The lode in the winze sinking below the shallow adit level is 2 ft. wide, worth 1 ton of lead ore per fm.—Tribute: The lode in the pitch in bottom of the 32 is 2 ft. wide, worth 8 cwts. of lead ore per fm. The lode in the pitch in back of the 32 is 4 ft. wide, worth ½ ton of lead ore per fm.

DALE.—R. Niness, Feb. 8: The Pipe vein is taking a more rapid dip than it has done for some time past, consequently we are at present prevented from working the bottom course of ore to advantage, but we will do so as soon as possible. The tribute pitch on Johnson's lode is yielding some good ore.

DARREN.—R. Williams: The lode in the adit (Oliver's) has assumed a more solid form during the last two or three days, producing some very good stones of lead ore, and promises strongly to improve. The stopes in back of the 15 are producing stuff of paying quality, and lode large. In the 15, driving west, the lode is of a very strong character, but for the present unproductive. The men who were placed in the 15 east are for the present opening ground around the bottom of the shaft to make a little more plat room, which is necessary now, and more so when we begin to sink again, which should be done as soon as possible to further prove and lay open the shoot of ore we have been following down. We are drawing away the accumulation of stuff left underground last month, and dressing as fast as we can.

EAST CARADON.—J. Seccombe, Feb. 8: Caunter Lode: The 70 east is unproductive. The 80 east is worth 18*l.*: and the 80 west 18*l.* per fm.—New Lode: The 60 west is worth 8*l.* per fm.—South Lode: The 80 west produces stones of ore.

EAST CARN BREA.—Thos. Glanville, J. Scholar, Feb. 8: No. 3 Lode: In the 70, driving east of the cross-cut, the lode is producing 2 tons of ore per fm. In the 60 fm. level, driving west of the winze, the lode is producing 2 tons of ore per fm. In the 60, driving east of Thomas's shaft, the lode is producing 3 tons of ore per fm. In the 40, driving east of Thomas's shaft, the lode is producing 3 tons of ore per fm.—New Lode: In the 44, driving west of the winze, the lode is producing 1 ton of ore per fm.—No. 4 Lode: In the 50 fm. level, driving west of the cross-cut, the lode is producing 1 ton of ore per fathom.

EAST CHIVERTON.—J. Nancarrow, Feb. 7: Last month our sumpmen sunk 2 ft., which made the shaft 50 fathoms deep. We have cut the plat in this level, cased, divided, and bedded down the shaft, and commenced to sink for the 60 fathom level. Last Saturday, being our setting-day, we set the engine-shaft to sink for one month, by eight men, at 12*l.* per fathom. I am glad to say they have made a good beginning for a deeper level; the ground is tolerably easy, and I must say the lode is greatly improving as we see it in depth, and I fully think our chances will be good if the lode continues to improve in the 60. We have also set the drawing, filling, and landing at 7*l.* 10s. per month. Other places working the same as for some time past.

EAST DARREN.—Feb. 7: At Taylor's shaft, in the 116 fm. level east, the lode is from 3 to 4 feet wide, yielding small stones of ore, but not to value. In the 104 east the lode is 3 ft. wide, a little improved for lead ore since last reported, producing from 12 to 15 cwts. of the latter per fathom, and looks promising for further improvement. In the 92 east the lode is from 7 to 8 feet wide, producing about 1½ ton per fathom. In the same level westward, on the south part of the lode, the drivage is suspended and the men are put to sink a winze in the bottom behind the end; the lode at this point is large, producing about 2 tons of lead ore per fm. In the same level, west of boundry winze, the lode still continues to be hard and unproductive for lead ore. In the 68 east the lode is 3 feet wide, producing about 1½ ton of lead ore per fathom. At Reed's shaft, in the 80 west, the lode is from 3 to 4 feet wide, unproductive for lead ore. The stopes and pitches throughout the mine continue to yield their usual quantities.

EAST GUNNISLAKE AND SOUTH BEDFORD.—J. Phillips, Feb. 9: The lode in the 36, east of Gard's shaft, has improved, and is worth 1½ ton of ore per fm., and is looking well for a further increase of yield. In the deep adit we still continue to drive by the side of the lode, thinking it advisable to get a fair distance off the cross-course before cutting through the lode; the wall of the lode is well defined, and there is a beautiful killas by the side of it. Gad's shaft is much the same as last reported.

EAST JANE.—J. Seccombe, Thomas Hodge, Feb. 4: The engine-shaft to sink below the 36, by nine men, 9 fms., for 105*l.*; this will be deep enough for the next level. To drive the 36 south west from the eastern part of the lode, by six men, at 4*l.* per fm.; we have driven 3 fms. on the eastern part of the lode, which is composed principally of flookan, with good stones of lead. All the water is coming from the western side of the level, and we have no doubt that the western or most productive part has not as yet been cut. To drive the 26 south by three men, at 2*l.* per fm.; the lode is 3 feet wide, composed of flookan, white iron, and friable spar, producing saving work for lead, and promising to improve. To drive the 26 north, by two men, at 2*l.* 5s. per fm.; the lode is 2 ft. wide, yielding good stones of lead occasionally. To drive the 26 south from Williams's cross-cut, on the eastern part of the lode, by four men, at 30s. per fm.; the lode is producing 4 cwts. of lead per fm. To drive the 26 cross-cut west by two men, at 4*l.* per fm.; we have resumed this cross-cut to intercept the western lode. A stope in back of the 26 south, by six men, at 20s. per fm., and one by six men, at 25s. per fm.; the lode in these stopes is very changeable—at present it produces 4 cwts. of lead per fm. To sink a winze in bottom of the 14 south, by six men, at 3*l.* per fm. This winze will, we anticipate, open some good ground, as we had a good lode in driving the level.

EAST LAXEY.—R. Rowe, Feb. 7: No. 1 lode has somewhat improved sinking below the adit level, having again broken some stones of lead and jack in it to-day. No. 2 lode in the deep adit level, driving north, is split into two parts, and I have to-day directed a cross-cut to again intersect the western part, which always carried most of the copper appearances. The new east and west lode continues to show important signs, and we are now driving to intersect it further west, near the junction with No. 2 north and south lode, which may possibly take two or three weeks.

EAST MARGARET.—B. Martin, J. H. Birch, Feb. 9: The 87 stope east, on engine lode, is worth 15*l.* per fm. The 57 stope east is worth 5*l.* per fm.—Curgenven's Lode: The 20 end, east of shaft, is worth 6*l.* per fm. The 10 end east is worth 12*l.* per fathom. The adit end east is worth 7*l.* per fm.

EAST PROVIDENCE.—T. Uren, W. White, Feb. 8: The 70, east of Wilson's shaft, on Bamfield's lode, is worth 6*l.* per fm. The 60, east of junction, on Bamfield's lode, is worth 7*l.* per fm. The 50, east of cross-cut, on Bamfield's lode, is worth 5*l.* per fathom. The 50, east of cross-cut, on the branch, is worth 6*l.* per fm. No. 1 stope in back of the 60, on Bamfield's lode, is worth 10*l.* per fm.; No. 2, in back of the same level, is worth 20*l.* per fathom; No. 3, in bottom of the 60, on Bamfield's lode, is worth 10*l.* per fm.

EAST ROSEWARNE.—J. James, Feb. 9: Hallett's shaft is much as last reported. The 75 east is opening tribute ground. In the 75 west the lode is about 2 ft. wide, producing stones of ore. In King's shaft the lode is 1 ft. wide, worth 12*l.* per fathom; I think this will improve shortly. In the 65, west of King's, the lode is 18 inches wide, worth 23*l.* per fathom. The stopes throughout the mine are yielding their usual quantity of ore.

EAST SNAEFELL.—R. Rowe, Feb. 7: The lode in the deep adit is again gradually increasing in size. No alteration in the shallow adit. We have just commenced operations on No. 2 lode near the elvan course.

EAST TRESKERBY.—J. Nancarrow, Feb. 6: Saturday last was our usual monthly survey, when the following bargains were set:—The 12 to drive east, by two men, at 4*l.* 15s. per fathom; lode for the present small. The stope in the back by four men, at 1*l.* 10s. per fathom; here the lode has improved, worth 5*l.* per fm. The back of the 12 west to stope by four men, at 2*l.* 10s. per fathom; lode worth 5*l.* per fm. The stope in bottom of the 12 was offered to six men, at 4*l.* per fm., but refused; this will probably be set in a day or two; lode worth 14*l.* per fm. The rise in back of the 30, to four men, at 10*l.* per fm.—a very promising lode for copper. The 30 cross-cut to drive north, by six men; the end is still wet and rather hard; the present price is 6*l.* 10s. per fm. The 30 east, to six men, at 7*l.* 10s. per fathom; the lode here has considerably improved in the upper part of the end; it is 2 ft. wide, very good for copper ore, and appears to be making down in the end; this is an important discovery, and we hope to report more fully on it in a few days.

EAST WHEAL LOVELL.—J. Burgan, Feb. 9: The south lode in the shaft, sinking below the 28, has very much improved, so much so that it is now worth over 90*l.* per fathom, even at the present low price of tin. On the north lode we are cutting plat at the bottom of the mine, and making fair progress, also driving the cross-cut from same depth to intersect the south lode, which is 7 or 8 fms. apart. We hope also to make good progress in laying out the work for the development of the turnpike shaft lode.

EAST WHEAL RUSSELL.—John Goldsworthy, Feb. 2: *Telegram:* In the 130 the lode is worth 12*l.* per fathom, and there is an indication of being near a course of ore.—J. Goldsworthy, Feb. 3: In the 130 the lode is worth 12*l.* per fathom, and promising an improvement.—J. Goldsworthy, Feb. 7: In the 130 the lode is disordered by a horse of killas, worth 8*l.* per fm.

— John Goldsworthy, Feb. 8: Homersham's shaft is in regular course of sinking below the 130, to the south of the lode, in favourable ground for progress. In the 130 cross-cut, at Soper's, driving north, the ground is very much improved, and good progress is being made. In the rise in back of the 130, east of Soper's cross-cut, the lode is 3 feet wide, composed of quartz, prian, and copper ore, worth of the latter 18*l.* per fm. In the 130, east of Soper's cross-cut, the lode is 3½ ft. wide, composed of capel, quartz, prian, mundic, killas, and copper ore, worth 8*l.* per fathom. The horse of killas appears to be leaving the lode, which has disordered the lode; no doubt as soon as the killas disappears the lode will improve. In the 120, west of Maynard's cross-cut, the part of the lode being carried is 4½ ft. wide, composed of capel, iron, mundic, and prian, and producing a little copper ore. In the 77, east of Homersham's shaft, and driving west of Northey's cross-cut, the lode is 3 feet wide, composed of capel, iron, gossan, and prian, and producing stones of green carbonate of copper ore, not sufficient of the latter to value at present. In the 45 east the lode is 3½ ft. wide, composed of capel, quartz, and mundic, and producing a little black oxide of copper ore; the lode presents a promising appearance. In the cross-cut driving north in the 88, west of Hitchins's engine-shaft, the ground is favourable for progress, with an increase of water; the stratum is strongly mineralised.

— J. Richards, Feb. 9: Homersham's shaft continues to be sunk below the 130 to the south of the lode in favourable ground, and good progress is being made.—Homersham's Shaft: In Soper's cross-cut north, at the 130 east, the ground having greatly improved good progress is being made; it is also congenial for mineral. In the 130 east, and east of Soper's cross-cut, the lode is from 3 to 4 ft. wide, and for the present in rather a disordered state; it is, however, promising, and is worth 8*l.* per fathom. In a new, or Barkell's rise, in the back of the 130 east, and east of Soper's cross-cut, the lode is worth 20*l.* per fm. In the 120 west, and west of Maynard's cross-cut, on the north part of the lode, the lode, or part thereof being carried, 4½ ft. wide, is composed of capel, quartz, iron, prian, and a little ore. In the 77 east, west of Northey's cross-cut, on the north part of the lode, the lode is 3 ft. wide, consisting of quartz, capel, gossan, prian, and a little green carbonate of copper. In the 45 east the lode is from 3 to 4 ft. wide, and presents a promising appearance, being composed of mundic, quartz, capel, prian, and a little black oxide of copper. In William's cross-cut north, at the 88, west of Hitchins's engine-shaft, the ground continues favourable for progress, and is congenial for mineral.

EAST WHEAL TOLGUS.—Feb. 8: Redruth Consols Lode: The lode in the 34 fm. level east is looking much the same as for some time past; it is 2 ft. wide, composed of spar, mundic, and capel. In the 34 fm. level cross-cut south the ground still continues hard.—New Lode: In the adit level west we are driving south on a cross-course, the lode, we believe, being heaved in that direction.—New South Lode: We have opened about 6 ft. west in the adit level on this lode, which is 2 ft. wide, and consists of spar, mundic, spots of ore, and killas. The ground in the adit level cross-cut south is moderately easy.

EAST WHEAL VOR.—J. Pollard, Feb. 8: At the engine-shaft the dividing and casing is completed from the 70 to the 80, and whim drawing from the latter level. The shaftmen are busily engaged in cutting plat; it will be finished as quickly as possible, and the sinking resumed. In the 70 west the lode is 2½ ft. wide, with occasional stones of tin.—Smith's Lode: In the 60 east the lode is large—full 3 ft. wide, composed of gossan, blende, mundic, prian, quartz, and a little tin—a kindly lode. In the same level west the lode is presenting a better appearance; it seems to be coming together, and more settled. No other change to notice.

FURSDON.—J. Collins, Feb. 9: The cross-cut south at the 11 is being driven 14 ft. this month and still in hard capel, letting out a little water; I believe it advisable to drive some distance farther, in order to be fully satisfied with the south part of the mine. In the end at the 21 we have intersected a cross-course, which appears to be a large one, 12 feet from the one we drove the cross-cut in; judging from the present appearance the lode has heaved north. The men are now taking down the north part of the lode, and when it is completed we may form a better idea where to drive to cut the lode west of the cross-course. The pitches in the bottom of the 11 and back of the 21 are the same in value, worth about 12*l.* per fm. The dressing is progressing favourably.

GAWTON COPPER.—G. Rowe, Feb. 4: The ground in the 50 cross-cut north continues moderately favourable, and of a good description for the production of minerals.

GOGINAN.—Feb. 7: The lode at the 100, east of Gilbertson's shaft, is 4 ft. wide, and still rather disordered by cross-joints, although the lode looks promising, and yields good stones of ore. The lode at the 80, west of Bryn Pica shaft, is without any alteration since last reported, still yielding a little ore. The lode west of Bryn Pica shaft, at the 70, is 3 ft. wide, producing 10 cwts. of lead ore per fm. Nothing of importance has yet been met with in the cross-cut south at the 60, or deep adit level, although strings of spar are still seen crossing the end. The pitch over the 100 is yielding 9 cwts. of ore per fm. The pitch over the 60, east of Taylor's shaft, is yielding 10 cwts. of ore per fm. The shaft sinking below the 60, on the south part of the lode, at Level Newydd, is yielding good stones of lead ore, and good progress is being made. The stope over the 60, west of shaft, is in a lode 4 ft. wide, yielding 11 cwts. of lead ore per fm. The lode at the 60, going east of shaft, is 2 ft. wide, showing a little ore, but not to value.

GOLCH HILL.—Feb. 8: The 60 end, driving north of Pulley shaft, is much the same as last reported, still driving with the old workings. At North Golch Hill the men are progressing favourably with the shaft, which is without alteration since my last report.

GOTHIC.—Feb. 10: The ore ground is greatly improving, and the miners are anxious to change from tutwork to tribute. The eastern ore ground in the 30 is worth 16 cwts. per fathom, and the ground opposite the shaft yields in the 25 fm. level from 25 to 30 cwts. per fathom.

GREAT BRIGAN.—John Tredinnick, Feb. 8: At the new shaft, near the eastern boundary, a cross-cut is being driven south of the above shaft in the 10 to cut the south part of Wheal Saturday lode, which according to the underlie in the level above we have about 2 fathoms further to drive to cut the same. The lode in the deep adit level, driving west of said shaft, has improved, and is worth for copper ore 5*l.* per fathom. The lode in the winze sinking below the deep adit level, east of the cross-cut, looks promising, and producing good stones of ore. The lode in the winze sinking below the deep adit, about 10 fathoms further east, is worth 7*l.* per fathom. The lode in the end, driving east of the cross-cut, in the deep adit level, is worth 5*l.* per fathom; this piece of ground looks promising to yield large quantities of one in the deeper levels. No change has taken place in the cross-cut, driving south of Highburrow shaft, in the 20. The lode in the middle level, west of the western shaft, is worth 15*l.* per fathom. In the cross-cut driving north, in the 42, to cut the same lode, we have met with several branches of ore making into the lode, which looks very promising that the lode will be productive.

GREAT CARADON.—F. C. Harper, Feb. 7: The ground in the 60 cross-cut, driving north of the engine-shaft, has much improved since I last wrote you, consisting of light-coloured killas, traversed by small branches of quartz, prian, mundic, and spots of ore. In the end driving west from the south cross-cut in the same level (60), on the course of the lode, the lode is about 26 in. wide, composed of blende, mundic, quartz, iron, and good stones of copper ore—a kindly lode, and letting down a little water.

GREAT DEVON AND BEDFORD (Colcharton).—J. Richards, Feb. 8: There is no change in the ground at Chenhall's engine-shaft sinking below the 40 since my last report. The lode in the 40, driving west, is about 1 ft. wide, with every appearance of its shortly becoming larger; it is composed of mundic and spots of copper ore, with a quantity of water coming from the lode. There is no change to notice in the lode at the same level driving east. The lode in the 30, driving west, is about 2 ft. wide, producing capel, mundic, and a little copper ore, but not sufficient of the latter to value. I am of opinion that we have driven over a good course of ore in this direction.

GREAT NORTH DOWNS.—J. W. Crase, M. Jenkin, Feb. 8: In consequence of our adit breaking down at Wheal Peevor, and the water coming back to the engine-shaft, where it rose to the 57 throughout the bottom of the mine, but little has been done since last report. The lode in the 75, west of King's shaft, in the bottom of the end, is looking well, and has the appearance of being the coming in of a course of ore. There is a distance of about 26 fms. between this and the 70, east of Sleggan's, where the lode is worth 10*l.* per fm.; this augurs very much in favour of there being productive ground throughout the above distance. We have secured the adit, taken up the water, and hope to drain the mine to the bottom by the end of the present week. The tinstuff sold yesterday realised 89*l.* 0s. 9d.

GREAT NORTH LAXEY.—R. Rowe, Feb. 7: The shaft sinking below the 60 is in a productive lode, and the 60 end resumed to drive south in an unusually promising lode, compared with anything before seen in this mine, fully 3 ft. wide, containing jack and lead. The adit level is commenced to drive south, the lode in which has already improved; when we began it was small and poor; now it is 1 ft. wide, containing a nice mixture of lead, in a lively quartz and gossan.

GREAT SOUTH TOLGUS.—J. Daw, Feb. 8: In the 154, east of Lyle's shaft, the lode is not quite so large as reported on last week; it is now 3½ ft. wide, producing 5 tons of copper ore per fm. We are driving west on this branch; it is 10 in. wide, producing 1 ton of ore per fm. Very little has been done in the winze sinking below the 154 this week, owing to an increase of water. In the 140 west, on the tin lode, the lode is 3 ft. wide, worth 6*l.* per fm. for tin.—P.S. We sampled to-day 180 tons of tinstuff.

GREAT WHEAL BUSY.—J. Tredinnick, C. Bawden, Feb. 4; Harvey's engine-shaft is now down to the 150. We have to-day let the cross-cut to nine men to drive south to intersect the lode. The lode in Offord's shaft, sinking below the 140, is 4½ feet wide, worth 25*l.* per fm. In the 140, driving east of Harvey's engine-shaft, the lode is 4 ft. wide, and worth 10*l.* per fathom per copper and tin. The lode in the 140, driving east of Offord's shaft, is 3½ feet wide, worth 15*l.* per fathom; the lode in this level, driving west of said shaft, is 4 feet wide, worth 10*l.* per fathom for copper and tin. The lode in No. 1 stope, in back of the 140, east of Harvey's engine-shaft, is 3 feet wide, and worth 10*l.* per fathom. The lode in No. 2 stope, in back of this level, is 4 feet wide, worth 18*l.* per fathom for tin and copper ore. The stope in bottom of the 130, east of Offord's shaft, is 4 feet wide, worth 30*l.* per fathom for tin and copper ore. In the 130, driving east of said shaft, the lode is 15 inches wide, worth 9*l.* per fathom for tin. The lode in the 110, driving east from Mathews's shaft, is 3 feet, and worth 8*l.* per fm. for tin. In the 100, driving east of said shaft, the lode is 3½ feet wide, worth 9*l.* per athom for tin. The lode in the 90, east of Mathews's shaft, is 4 feet wide, worth 12*l.* per fathom for tin; the lode in the winze sinking below this level is 2½ feet wide, worth 18*l.* per fathom for tin. The lode in the 80, driving east of Mathews's shaft, is worth 17*l.* per fathom. The lode in Walker's shaft, sinking below the 70, is worth for the length of shaft, 10 feet by 6 feet, 12*l.* per fathom for tin and copper ore; the lode in the rise in back of said level, against Walker's shaft, is worth for length of ditto, 10 ft. by 6 ft., 20*l.* per fathom for tin and copper ore; the stope in back of said level is worth 12*l.* per fathom. The lode in the 50, driving east of Mathews's shaft, is 3 feet wide, worth 12*l.* per fathom. The lode in Walker's shaft, sinking below the 36, is 5 ft. wide, worth 10*l.* for fathom for tin, and a little copper ore. The ground in the 36 cross-cut, south of said shaft, is still favourable for driving.

GREAT WHEAL FORTUNE.—J. Vivian, N. T. Miners, T. George, Feb. 8: Old Mine: The cross-cut at the 95 is driven north of Harvey's engine-shaft 82 fms., and is now about 4 ft. north of the elvan course mentioned in last report.—Blue Burrow Lode: The 95, driving east of cross-cut, on the north part, is worth 5*l.* per fm.; the same level, driving west, on the south part, is worth 5*l.* per fm. The 60, east of Blue Barrow shaft, is worth 6*l.* per fm. The 60, driving east of cross-course, on the middle branches, is producing stamping work.—Carnmeal: No change in the engine-shaft sinking below the 114. The lode in the 114, driving east, is disordered by the cross-course, which we expect to get through this week. The lode in the 102 east is 4 ft. wide, unproductive. Hick's shaftmen are now employed cutting plat at the 40, which will be completed in a few days.

GREAT WHEAL GRYLLS.—E. Rogers, J. Pope, Feb. 9: Michell's flat-rod shaft is down 12 fms. below the deep adit, and has intersected the lode, which is 1½ ft. wide, worth 4*l.* per fm.; by reason of cutting the lode the water has increased, so as to prevent us from prosecuting operations at this point until the engine is put to work; the shaftmen are, therefore, engaged fixing the pitwork, which will be done as quickly as possible. In the cross-cut south, in the deep adit, we have cut Stevens's lode, which is 3 feet wide, and will just pay for driving, which is 3*l.* per fm.

GRYLLS WHEAL FLORENCE.—Edward Rogers, Edmund Rogers, Feb. 7: The 12 is driving east of the engine-shaft by six men, at 8*l.* per fm.; the lode is 6 ft. wide, and will just pay for driving; at this level, driving west, the lode is 4½ ft. wide, worth 5*l.* per fm.; price for driving 6*l.* 10s. per fm. The cross-cut at the adit level is driving north of engine-shaft by two men, at 4*l.* 15s. per fm. Our surface operations are progressing as fast as the weather will permit.

GWYDYR PARK CONSOLS.—W. Smyth, Feb. 8: No lode taken down in Gwydyr stope or middle level for the month. In Gwyn Lliflon adit the ground seems a little better for driving, and looks more mineralised than it has been.

HALLENBEAGLE.—E. Richards, R. M. Kitto, Feb. 6: We have cut a lode at the engine-shaft about 6 fathoms below the 44; it is 18 in. wide, composed of copper ore, peach, spar, and mundic, a very kindly lode, and letting out a large quantity of water; it drained Nos. 3 and 4 winzes, between Stone's and engine shafts, 2 ft. 4 in., but, in consequence of an old shaft breaking away in the bottom of the shallow level coming from Boscawen Mine, which let down the water, it is again rising. The lode in No. 3 winze, east of the engine-shaft, on the north lode, is 18 in. wide, worth 12*l.* per fathom. The lode in No. 5 winze, west of Stone's shaft, on the north lode, is 18 in. wide, worth 7*l.* per fm.; all these winzes in the bottom of this level are down to water. The lode in the 40, driving west of engine-shaft, on the north lode, is producing stones of ore. The lode in the 43, driving east of Bawden's shaft, on Reed's lode, is small and unproductive; the lode in the same level, driving west of Bawden's shaft, on Reed's lode, is worth 5*l.* per fm. The lode in the 43, driving west of Reed's shaft, on Reed's lode, is worth 4*l.* per fm.; the lode in the same level, driving east of said shaft, is worth 5*l.* per fm. The water is up to the bottom of the level in the two last-named shafts, which will oblige us to suspend all operations in the 43 in this part of the mine. We hope to be able to sample 300 tons of copper ore next sampling.

HAWKMOOR.—J. Richards, Feb. 7: The lode in the stopes in the back of the 25, east of eastern engine-shaft, is worth 1 ton of copper ore per fm. In the cross-cuts north and south at West Hawkmoor the ground is easy for progress. The stopes in back of the adit level, on No. 3 lode, are turning out some very good work for tin ore. We sampled on Friday last a parcel of copper ore, computed 21 tons.

KELLY BRAY.—G. Rowe, Feb. 8: We have completed the line of flat-rods to the new shaft, put in shears, and sent down sinking-lift, where the water is in fork; all the new machinery attached is in first-rate working order. The shaft will be forthwith in regular course of sinking by nine men. The ground in the rise in back of the 25, against new shaft, is moderately favourable, and progressing very satisfactorily. There is no particular change to notice in any other part of operation since last reported on.

LADY BERTHA.—Capts. Harpur and Metherell, February 9: The lode in the new eastern shaft, sinking below the 41 east, is between 2 to 3 ft. wide, composed of quartz, mundic, peach, and good stones of ore, saving work. In the winze sinking below the 41 west the lode is about 2 feet wide, consisting of ore, mundic, quartz, &c., worth of the former 4 tons, or 16*l.* per fm. In the end driving south to the east of the great cross-course at the 30 the ground is moderately easy for exploring, composed of flookan, prian, mundic, and at times spots of copper ore. The tribute pitches continue to yield about the same as usual.

LONG RAKE.—Capt. Evans, Feb. 8: In consequence of the increased quantity of water in the mine we have done but little in the 90 or 80 since last report. The 80 is in a lode 4 ft. wide, and worth 1 ton of ore per fm. The stope in roof of this level is producing good work for tin. The 70 east will produce 1 ton per fm.; lode 4 ft. wide. The stope in the roof of this level will produce ½ ton per fm. A winze sinking below the 70, west of middle shaft, immediately over the 80, is improving for lead ore, and will produce ½ ton per fm. The 60 east is getting into more settled ground, and promises to be of value for lead ore shortly. There is no change in the other pitches in the mine. Had it not been for the severe weather lately, which has obliged us to fix a new 13-in. plunger at the 48, we should have sampled our usual quantity of lead ore for this week's sale; we are, therefore, obliged to put off our sampling a fortnight in consequence.

MERLLYN.—Wm. Sandoe, Feb. 8: In the 20, driving north on the side or parallel lode, we have now a little lead, and from the favourable change in the ground during the past week or two I expect an improvement in this level shortly. The stopes in back and bottom of this level continue to produce a very good mixture of lead ore, and look promising. The stope in back of this level, near the junction, looks very well, and is worth 6 cwts. of lead ore per fathom. The 20, driving east, has been driven from the north and south lode about 5 fathoms, and has produced no lead until the past day or two, when a bed of shale which has regularly followed us became charged with lead, producing some good solid lumps right in the forebreast; this, I hope, may lead to something good.

MINERA UNION.—W. T. Harris, Feb. 9: Brabner's Shaft: The 80 north is without change since last reported. The pitch in the back of this level, north of cross-cut, is worth 10 cwts. of lead per fm. The pitch north of No. 1 winze is worth 1½ ton of lead per fathom. The pitch south of No. 2 winze, in the back of this level, is worth 10 cwts. of lead per fathom. The pitch in bottom of the 60, from the winze, is worth 15 cwts. of lead per fathom.—Williams's Shaft: The pitch in bottom of the 50 is worth 15 cwts. of lead per fathom, and very promising. The pitch in bottom of the 40, south of shaft, is worth 10 cwts. of lead per fathom. The dressing is carried on as fast as the state of the weather will admit.

MOLLAND.—T. Bennetts, Feb. 8: The ground in the engine-shaft sinking below the 62 is improving a little; a floor of killas is making its appearance from the north, and will, no doubt, cut out the floor of bastard limestone in course of sinking. The stopes in back of the 42 east are not looking quite so well as last week, producing at present 1 ton of ore per fathom. In the winze sinking below the 32 east we have an improvement, the lode being now full 4 feet wide, and will produce 1½ ton of ore per fathom, of moderate quality, the small leader of ore referred to in my previous reports having fallen into the lode.

NEW CONCORD.—T. Foote, Wm Snell, Feb. 6: The shaftmen are still engaged clearing the 38 west. The lode in the 38 east is 2 ft. wide, principally composed of mundic, and looking promising. We have suspended the clearing of the 20 west, and placed the men to rise in the back. As there is a long piece of ground standing in this level, and there was a great quantity of ore taken away from the level above, we think this ground ought to be proved. It being easy for rising, we shall be able to prove this piece of ground at little cost.

NEW CROW HILL.—Feb. 7: The 55 east is still showing a large jacky, mundicky lode, which is very wet, and producing some fine stones of ore. The stopes in the back of the same level are without much change since last reported on, still showing a fine-looking lode for the whole length of the stopes, worth for lead from 5 to 6 cwts. per fm., and for mundic 2 tons per fathom. We are progressing favourably with the cross-cut west at the 70, and I hope to let the eastern cross-cut also on Saturday to a full pare of six men, and shall push it on to the lode with as little delay as possible.—Louisa: We are getting on pretty well here so far, and have commenced clearing up the engine-shaft below the 20, with which we are making good progress. The shaft is closely divided and cased down, and a footway firmly fixed.

NEW ROSEWARNE.—E. George, W. Mitchell, Feb. 8: The lode in the 84, east of Bickford's shaft, is 5 ft. wide, worth 4*l.* per fm.; the lode in the same level west is 5 ft. wide, worth 7*l.* per fm. The lode in the 74, west of Bickford's shaft, is 7 ft. wide, producing a little tin. The lode in the winze sinking below this level is 6 ft. wide, worth 20*l.* per fm. The stope in back of the 74 is worth 20*l.* per fm. The lode in the 67, west of Bickford's shaft, is 4 ft. wide, at present poor. The stope in back of the 74, west of winze, is worth 10*l.* per fm. The lode in the 58, west of Bickford's shaft, is 4 ft. wide, producing a little tin. The stope in the back of this level, east of winze, is worth 15*l.* per fathom. The stope west of winze is worth 30*l.* per fm.

NEW TRELEIGH.—S. Michell, Feb. 8: There is but little change in the 90 since last week; the end will yield 2 tons; the rise and stope in the same level will turn out from 2 to 3 tons of ore per fathom. We have intersected the cross-course in the 80, west of the shaft, and think it advisable to defer cutting through the flookan for a short time until the water abates. The unusual quantity of rain that we have been visited with this season has very materially increased the water, especially from the western part of the mine. The speed of our engine is fully increased one-half, but we manage to keep the mine drained. The horse-whim is drawing from the 26, at the new shaft, and the men will complete the plat in the course of a few days at that level.

NEW WENDRON CONSOLS.—Richard Gluyas, Feb. 7: The south shaft is sunk 4 fathoms 3 feet below the 24; it was set to sink to the 34, by nine men, for 113*l.*, the bargain; the lode is 12 inches wide, worth 25*l.* per fathom for length of shaft, and I am highly pleased with the general appearance of the lode in the shaft. The back of the 24, east of shaft, is stoping by four men, at 3*l.* per fathom; the lode is 1 foot wide, worth 15*l.* per fathom for tin. The 24, east of shaft, is driving by four men, at 5*l.* per fathom, and we have driven 5 feet to the east of the caunter lode, but have not yet seen the lode on the eastern side: I expect the lode is heaved to the right, which is generally the case. We are stoping the back of the 24, west of shaft, by four men, at 3*l.* per fm.; the lode is 1 foot wide, worth 14*l.* per fathom for tin.

NEW WHEAL MARTHA.—G. Rickard, Feb. 9: Very little progress has been made in cross-cutting the south part of the lode at the 86, owing to the water being in, but we are happy to say it was in fork last night at ten o'clock. The lode in the 74 west is divided by a small horse of killas; the north part is about 1 ft. 6 in. wide, producing some good stones of yellow copper ore. The south part is at present unproductive. The lode in the 64 west is worth about 16*l.* per fm., and looking very promising indeed. The lode in the stopes in bottom of the 52 is without any particular change to notice since last week, worth from 35*l.* to 40*l.* per fathom. We have resumed driving the 40 west on the north part of the lode, which is at present yielding saving work for copper ore. We may expect a decided improvement after reaching the cross-course, which is about 6 or 7 fathoms ahead. The lode in the stopes, east and west of winze, at the 30, is worth full 25*l.* per fathom; by effecting a communication with the above winze it has afforded good ventilation in this part of the mine, as well as laying open some valuable ore ground. The tribute department consists of eight pitches, working by 33 men, at an average tribute of 8s. 6d. in 1*l.*

NEW WHEAL ROSE.—J. Middleton, J. Hammill, Feb. 9: Since last report the north and south lode, in driving south from hauling shaft, has somewhat improved, although at present it is a little flatter than usual. There is more prian and spar, and the strata surrounding light in colour, and more mineralised. We are now 80 fms. south from shaft, and find the air getting bad.

NORTH BULLER.—R. Pryor, H. Harvey, Feb. 4: The ground in the 100 fm. level cross-cut, south of engine-shaft, is without change to notice since last reported on. We have not yet taken down the lode in the 100 fm. level end, east of cross-cut, on new south lode, but shall do so next week, particulars of which we will forward on at once.

NORTH CHIVERTON.—J. Hampton, Feb. 9: The eastern end in the 20, from little engine-shaft, is worth 3*l.* per fathom for lead, and some saving work for blende. The western end, going away towards the new engine-shaft, has very much improved; the lode is 4 ft. wide, and lead and blende have been on the increase ever since we commenced driving. To-day we have cut a solid branch of lead, 1 in. wide, which appears to be forming itself into a leader. Besides this, the lode produces casual stones of lead and blende, but the latter is evidently giving way to the former at this bottom level, which is 30 fms. below surface. This part of the mine almost daily improves, and will, doubtless, ere long be yielding large quantities of lead. On this lode we have a remarkable instance that lead comes in under the blende. I may also add that we shall cross-cut to another lode, which in the level above is the best lode we have in the mine, and for 3 fms. in length, the distance opened on it, is worth, as nearly as can be valued, 20*l.* per fm. for lead. The stopes in back of the 20 are producing from 1½ to 2 tons of blende per fm., and good saving work for lead. The 5, west of old engine-shaft, still improves for blende, producing some good saving work. The eastern end is still being driven by the side of the lode, and as soon as we get to the east of the shaft the lode will be operated on; and, judging from what we have already seen, and the bottom of the level above, there is no room to doubt that a good lode will be laid open at this level also. We have drawn to surface some lead from the caunter lode in the deep adit level, which appears to be very rich for silve; the lode is compact and regular, and varies in quality from 3 to 5 cwts. of lead per fm.

NORTH DEVON SILVER-LEAD.—J. Blamey, Feb. 8: Caunter Lode: The rise and stope in back of the adit are worth 8*l.* per fm. The adit cross-cut has not not yet reached the lode; it is producing strings of ore, but not to value. The stope below the adit is worth 18*l.* per fm. The stope in back of the 10 is worth 12*l.* The rise and stope in back of the 30 are worth about 25*l.* per fm. We have begun to drive south-east on the caunter; it is poor at present. We are rising in back of the 20, and hope to hole to the 10 in about three weeks; the ground is very tight.—Middle Lode: The stope below the adit is worth 12*l.* per fm., and the stope below the 20 about the same value. We have 20 tons of ore dressed and dressing, but our next sampling will be short, in consequence of the suspension of the rich winze below the 10.

NORTH DOLCOATH.—Captains Vivian and Paull, Feb. 4: The engine-shaft is now 85 fms. below the adit, where the lode is 5 ft. wide, and producing good stones of copper and tin. We shall now divide the shaft, and make it complete to the present depth, with the object of driving at this point, as we are anxious to see the lode in contact with the cross-course, which is only 8 or 9 fms. to the west. We purpose, however, to resume sinking with all possible dispatch, as the lode appears to be favourably changing with increased depth, and should we meet the elvan course, which it is probable is now near at hand, we may expect a decided and favourable change. In the 75 south, on the cross-course, we are meeting with blende and mundic in the cross-course, seeming to indicate the near neighbourhood to a lode.

NORTH DOWNS.—J. Grenfell, T. Pearce, Feb. 7: King's engine-shaft is sunk 13 ft. below the 85 fm. level; the character of the ground is, in our opinion, good for mineral, and the men are making fair progress in sinking. We have suspended the 85 east and west, and put a dam in the level to prevent the flow of water in the shaft from those ends, which very much impeded the sinking, but we shall soon be down the required depth for fixing a lift in this level, when the driving of the levels can be resumed if it be advisable to do so. The 60 is extended east of King's shaft, on the south lode, 6 fms., it has produced good stones of ore at times, but not to value. In the rise in the back of this level, communicated with the 50, we have opened ore ground, some of which is working by four men, at 10s. in 1*l.*, tribute. The 60 is extended east of Bennett's shaft, on the main lode, 35 fathoms, and although not rich has opened tribute ground for nearly the whole drivage; there is a branch of ore within 4 fathoms of the end worth 6*l.* per fathom, but the lode in the present end is disordered by a cross-head, and is unproductive. The 50 fm. level cross-cut is extended south of the main lode 53 fathoms, and the character of the ground for mineral cannot be surpassed; should the lode be met with in this channel of ground it cannot, in our opinion, fail in making a course of ore. The 50 is extended east of the cross-cut on the south, or new, lode 25 fathoms; this level has been worth on an average for 20 fathoms about 8*l.* per fathom, but for the last 5 fathoms the lode has been very splicey, and the end it at present unproductive. There is a stope in the back of this level, 5 fathoms behind the end, working by two men, at 3*l.* 10s. per fathom, worth 8*l.* per fathom. We have intersected the south branch in the cross-cut, in the 40, west of King's shaft, and have opened on it about 2 fathoms; it is very regular, and will produce at this point 1 ton of good ore per fathom. We have a tribute pitch working in this branch in the back of the 50, by four men, at 9s. tribute. The ore raised in this pitch, and sold at our last sale, realised 161*l.* 5s. 3d., and the whole of our ore realised 382*l.* 8s. You will perceive by the above report that the mine is poor, and the points of greatest interest likely to come off are King's engine-shaft and the 50 cross-cut, which are being pushed on as fast as possible, the former by nine and the latter by six men. We would here remark that all the pitwork required for sinking King's shaft to the 100 is on the mine.

NORTH JANE.—James Rowe, Feb. 7: Setting Report: The 12 fathom level end to drive west from Northey's shaft, by three men and three boys, at 2l. 15s. per fathom; the lode is 18 inches wide, worth 7l. per fathom for tin; the last few fathoms has opened good tribute ground. A winze to sink in the bottom of the adit, 2 fathoms ahead of this end, by two men and two boys, at 1l. 10s. per fathom; the lode is 2 feet wide, worth 7l. per fathom. The 12 to drive west of cross-cut, on the north lode, by one man and one boy, at 2l. per fathom, producing saving work. A stope in the 30, west of Kerr's, to five men and three boys, at 2l. 10s., worth 12l. per fathom. A stope in the 40, east of said shaft, to two men, at 2l. 10s., worth 6l. per fathom. The 10 to drive east of Kerr's, by two men, at 3l. per fathom; the lode at present is poor, but, judging from the lode in the adit level above, we expect an improvement in a few fathoms further driving. On tribute there are seven men and two boys, earning fair wages. In consequence of the unusual heavy rains we have been compelled to suspend operations on the silver gossans t the Ready Money shaft.

NORTH MINERA.—T. P. Thomas, Feb. 7: The engine-shaft is being sunk, and is composed of bastard limestone, gritstone, sand, and carbonate of lime, with a wall like the wall of a lode or swallow on the eastern end, and by which the water is drained. About 8 fms. west of the cross-cut in the 40 we have commenced to drive north on a well-defined and most promising lode, about 4 fms. wide, 18 in. of which is composed of carbonate of lime, and the remainder is composed of bastard limestone, carbonate of lime and shale, the whole being spotted throughout with copper and mundic; this lode is of great importance, as it serves as a cross-cut, and will be driven at a very much less expense than the cross-cut in the country. In the end of the 40 west we have intersected a very promising caunter lode, composed of shale, bastard limestone, and carbonate of lime, spotted with mundic; this lode is running in a southerly direction, and will intersect the lode previously seen in a few fathoms driving, thereby proving the lode and ground south of the level, and upon the intersection we expect a favourable change. In the back of the 15, west of the shaft, we are driving on a north and south lode, which is all in whole ground, and producing good lead, but it is not sufficiently explored to estimate the quantity per fm.; this lode, in driving north, will intersect the caunter lode, which in the 25 yard level was so productive for lead. You will see by the workings we are carrying on that this mine is being thoroughly developed, and from the appearance of this lode I have not the least doubt or fear of our ultimately having a rich mine in depth; the producing lode in Minera, although so rich in the 140 yard level and below, was unproductive and scarcely to be seen above the 100.

NORTH SHEPHERDS.—H. Bennetts, Feb. 8: The new plunger-lift is working well at the 20; the shaftmen have resumed the sinking of Decimus engine-shaft below the 20; the lode in the shaft is 2 ft. wide, and producing good stones of lead occasionally, and a very promising lode indeed; set to eight men, at 16l. per fm. In the 20 fm. level end, west of the engine-shaft, the lode is split into two branches. The branch on the footwall is 1 ft. wide; it contains rich stones of silver-lead, and looking very encouraging in the hanging-wall; there is another part of the lode 8 in. wide, composed of flookan, fine lead, and mundic, and of a very promising character, and it is our opinion when these parts of the lode come together an improvement will take place in the lode; set to four men, at 2l. 10s. per fm. At the same level, east of engine-shaft, on the north and south lode, in the north end, the lode is 2¼ ft. wide, composed of flookan, mundic, and fine lead, and a very promising lode. In the south end, on the same lode, the lode is 2 ft. wide, containing mundic, sugar-spar, and a little lead occasionally, and letting out a large stream of water; set to four men, at 2l. 5s. per fm. in each end.

NORTH WHEAL BASSET.—W. Roberts, Feb. 8: Main Lode: In the 112 west the lode is 3 ft. wide, producing saving work for tin. In the 102 west the lode is 1 ft. wide, at present unproductive. The lode in the 20 west is 3 ft. wide, producing stones of ore.—South Lode: In the 102 west the lode is 3 ft. wide, yielding a little tin.—North Lode: In the 42 fm. level cross-cut, north from Grace's shaft, we have cut into the lode 2 ft., but have not yet reached the north wall; it is a strong kindly lode, composed of capels, mundic, and a little copper ore, not sufficient to value. In the 32 east the lode is 1½ ft. wide, with occasional stones of ore. In the 20 west the lode is 1 ft. wide, composed of gossan, spar, mundic, and stones of ore. In the winze sinking under the 20 the lode is 2 ft. wide, producing good stones of ore.

OKEL TOR.—W. B. Collom, W. Metherell, Feb. 8: The lode in the 80 has been taken down, and it is found to be poor for ore, the lode containing a quantity of mundic, and water increasing. In the 65 east the capels still continue in the end, the north part of the lode; the lode will yield 3 tons of ore to the fathom. The three stopes in back of the 65, east and west of Northey's winze, will yield 9, 8, and 5 tons of ore to the fathom. There is no alteration in the lode in the 50 end, which is looking most promising for a discovery of ore. In Heydon's, or eastern winze, bottom of the 50, the the lode is a little disordered, now yielding 6 tons of ore to the fathom. Tregonning's stopes, in back of the 50, will yield 3 tons of ore to the fathom. In the stopes in back of the 40 the men are now desuing the lode; there is every appearance of there being a fine lode here when next taken down. In the back of the 80 there are four tribute pitches at work; also one in back of the 65, and one in back of the 50.

OLD GUNNISLAKE.—W. G. Gard, Feb. 9: The men are making good progress with the new inclined shaft. Parker's lode we are carrying 14 feet by 6 feet within timbers, as we purpose to run two tram wagons in it. The 20 west is progressing satisfactorily. We still drive through gossan, impregnated with copper ore; present price per fathom 3l. 10s.; but if the end holds as at present it will set next Saturday at 40s. per fathom, as it may be literally raked down. All other parts of the mine are much as last reported.

PEDN-AN-DREA UNITED.—W. Tregay, E. Thomas, Feb. 4: Sump: The heavy rains in the early part of the week having much increased the water upon our engine, the bottoms have been flooded, preventing all working deeper than the 110 since last reported. We have now forked below the 120, and expect to have the water all out to the bottom of shaft by Monday morning. In cross-cutting the north part of the lode in the 110 east we have as yet coarse quality tinstuff, but we expect work of better quality as the cross-cut advances; the south part of the lode in the bottom of this level is worth 40l. per fm. In the 100 east the ground east of cross-course is favourable for driving the cross-cuts. This week we have met with some strings of copper ore, but we have some fathoms yet before reaching either of the lodes. The 90 west rise is worth 8l. per fm.—Cobbler's: The 110 east end, on Skimmer's lode, is worth 8l. per fm. The 110 fm. level stopes, in the bottom of Cobbler's shaft, are worth 17l. per fathom. The 100 west end is worth 12l. per fm. The 90 east end is worth 7l. per fm. The 90 west end is worth 5l. per fathom. The 68 east end is worth 6l. per fm. In the 68 west the lode is looking kindlier, and producing stones of tin.

PENHALLS.—W. Higgins, J. Nance, Feb. 4: The 60 cross-cut, south of engine-shaft, is still pushed on with vigour, and the ground looks as if it is more settled and congenial for tin. The 50, driving west of cross-cut, on flat lode, north of shaft, has still its good appearance, and worth full 14l. per fm.

PRINCE OF WALES.—W. Gifford, Feb. 7: We have not done any work in either of the ends during the past week, as we have kept the men employed in taking out the ground for shaft-bob, balance-bob, raising stone for bob-pits, assisting smith, &c. We are pushing on our surface operations as fast as time and weather will permit.

ROARING WATER.—H. Thomas, Feb. 7: Grady's lode, stoping under the level, west of Grady's shaft, is large, containing rich purple and grey ore; in fact, a large portion is mixed with ore that will pay well for returning if a crusher were on the mine to make it marketable at a cheap and expeditious rate. In order to lay open this fine lode, Grady's shaft should be sunk at once, which will, no doubt, in a very short time more than pay for sinking, besides laying open valuable ore ground both east and west of the shaft, which could be taken away at a small cost, and with good profits to the company. The stopes at Bush's shaft are yielding good strong purple ore, much the same as when I last wrote.

ROBOROUGH DOWN.—T. Foote, W. Johns, Feb. 6: There is still a large stream of water coming out from the 20 end east. Our engine, stamps, and pitwork are working well. We shall take our parcel of tin to Truro to-morrow.

ROSEWARNE CONSOLS.—T. Uren, J. Berryman, Feb. 8: In the engine-shaft, sinking below the 70, the lode is producing good stones of copper ore. The 70, east of Ellen's shaft, has improved, now worth 12l. per fm.

SILVER VEIN.—E. Burn, Feb. 8: We are through the east and west lode, in the 60, but cannot say as to its size or value, owing to its being intermixed with the north and south at the point of junction. The ground appears favourable, and we shall drive off on its course as soon as convenient. The north and south lode, east part, is getting more settled, and containing a little ore. We shall drive to cut the western part in a few days. The lode in the 50 north is looking better, producing at present some good ore. We expect a further improvement daily in this end. The lode in the winze in the 40 is improved, worth at present 1 ton per fathom. We have placed the winze-men to carry down a 6-feet stope in the north end of the winze, that we may be able to set a tribute pitch here next setting-day if convenient. All other places are without any particular change since last report. The sale of ore will be on the 21st inst.; tenders will be forwarded to the office.

SORTRIDGE CONSOLS.—J. Richards, Feb. 9: In the 50, on Mayne's cross-cut south, the ground continues favourable, and good progress is being made. In Gilbert's winze, sinking below the 40, east of John's cross-cut, on No. 1 south lode, the lode is 18 in. wide, and yields good stones of ore. In the 20 east, and east of the eastern shaft, on the south part of the main lode, the lode is yielding saving work. In the deep adit level north the progress being made is rapid, and the ground of the same favourable character as heretofore.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Feb. 4: The ground in the rise in back of the 54, against new shaft, is just as when last reported. The heavy rains have brought such an influx of water into the new shaft that we have not been able to do anything towards sinking this week. The shaftmen have been employed taking out ground for foundation of bob-stand, &c. The weather is more favourable now, and I hope if it continues until Monday morning we shall be able to resume sinking.

SOUTH CARN BREA.—I. Richards, Feb. 8: We have had two breakages, one of the rods, and the other of the balance-bob, at the old engine-shaft, which, together with the almost incessant rains, have caused the water to rise above the 108 fm. level, consequently there has been nothing done below this point since my last advice. We have, however, repaired our breakages, and the water is again being drained. The lode in the 98 fm. level, east of the new shaft, is 2 ft. wide, composed of capel, quartz, peach, mundic, and a little of both tin and copper ores.

SOUTH CONDURROW.—J. Vivian, Feb. 4: The ground continues favourable for sinking in the engine-shaft, and from present appearances we shall reach the 30 at our next pay-day. We are driving the 20 north-west of engine-shaft, the ground being easy at this point, price 20s. per fm.; we calculate that we have about 7 fms. to reach the first lode. In driving the 20 south we are using all possible expedition to communicate with the same level driving north from West Basset lode, which, when effected, will drain this lode to the 20, and enable us to commence it at once to sink Vivian's shaft; this communication is also of great importance for ventilation. In the 10, west of engine-shaft, the cross-cut on middle lode is 1 ft. wide, and producing occasional branches of rich copper ore—a very kindly lode.—West Basset Lode: In the 20, west of Vivian's shaft, the lode is 2 ft. wide, with a branch of rich copper ore from 2 to 4 in. wide on the south wall—a very kindly lode. In the deep adit level, west of new shaft, the lode is 2 ft. wide, composed of soft quartz, gossan, prian, and tin. There is no alteration to speak of in any other part of the mine.

SOUTH CRENVER.—E. Chegwin, Feb. 7: In the adit end, driving west of cross-cut, on the north lode, the lode is about 9 in. wide, producing stones of mundic, with spots of copper ore, and ground favourable for driving.

SOUTH DARREN.—J. Boundy, Feb. 7: The lode in the 50 west is of a promising character, being all the width of the end, composed of beautiful mineralised killas, carbonate of lime, lead and copper ore, worth fully 20l. per fathom. I am very sanguine that this end will open out a splendid piece of ore ground. The lode in the 40 west has further improved since last report; present value for lead and copper ore 16l. per fm., and looks very promising for further improvement. We shall commence taking down the lode in the 20 west this week. All other places are without much change to notice since last report. The weather at present is favourable for dressing, and we are making good progress.

SOUTH DOLCOATH.—William Roberts, Feb. 8: The following tutwork bargains were set on the 3d inst.: The 70, to drive east on the caunter lode, by six men, at 11l. per fathom; lode 15 in. wide, producing good stones of ore. The flat-rod shaft, to sink below the 36, by nine men, the month, at 17l. per fathom; the lode is 1¼ ft. wide, producing stones of ore. A winze to sink under the 36, by four men, at 9l. per fathom; lode small. The 24 east, by two men, at 10l. per fathom; and the 12 east, by two men, at 7l. 10s. per fathom.

SOUTH GRYLLS.—J. Richards, Feb. 6: The lode in the western end at the adit level is producing good copper ore, improved considerably, looking well at present, and should it continue we shall soon have mineral for the market.

SOUTH HERODSFOOT.—R. Goldsworthy, Feb. 8: During the past month the 70 cross-cut has been extended east 2 fms. 3 feet, and west 3 fms. 4 feet 6 in.; the ground in the eastern end has been influenced by the cross-course, which retarded our progress a little; set at 7l. per fathom. The ground in the western end is improved a little, set at 8l. per fathom. The water is still troublesome.

SOUTH LOVELL.—Capt. Chappell, Feb. 10: In the north-eastern shaft the lode continues its productiveness and size. We are doing all we can to get the engine to work, so as to fork the mine by the time stated, and get to work fully in the various lodes, when there is no doubt we shall make good discoveries, in addition to the one already made in the north-eastern shaft, where the lode is worth 25l. per fm. The whole of the engine, pitwork, &c., is now on the mine.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Feb. 4: This week we have met with a slight run in the shaft, caused by the surface water going down, which has delayed our progress a little.

SOUTH WHEAL LEISURE.—J. Rabey, Feb. 7: Our engine-shaft is now sinking below the 12, by eight men, 5 fms. extent, at 10l. 10s. per fm.; also the flat-rod shaft sinking on the course of the lode; the lode is 2 ft. wide, producing stones of copper ore; this looks well for our having a good course of copper ore at the 12; and, on the whole, our mine bids very fair to be one of the prizes in mining for 1865.

SOUTH WHEAL LEISURE.—W. H. Reynolds: This mine is situated in the parish of Perranzabuloe, and embraces various lodes, traversing the clay-slate formation, in which the lodes of Perran St. George and Wheal Leisure have proved very productive. Operations are at present confined to one lode, on which an adit level was driven many fathoms some few years ago, and which has been extended a few fathoms further by the present company. The lode in the adit level is small, but in two or three places, where the former workers sank down a few feet below the adit level, the lode is from 18 in. to 2 feet wide, and contains some good work for copper ore. These places are at present filled up with stuff, but I have examined them on a former occasion. There is a 24-inch cylinder-engine erected, and the engine-shaft is sunk 12 fathoms below the adit level, where a cross-cut is driven north, in which the lode has been intersected, but at this point it appears to be split up into branches, on one of which the level has been driven east by four men, at 5l. 10s. per fm., to get under the point where the ore was met with below the adit level; the part on which the end is being driven is 6 in. wide, with some mundic in it; and when the branches unite, which they may in a few fathoms further, the lode will, probably, improve for copper. The eastern, or flat-rod shaft, is intended to be sunk 4 or 5 fms. deeper, to make it the depth of the 12 from engine-shaft, where a level will be driven west to meet the end east of the engine-shaft; this level is expected to get under the ore ground sooner than the end from the engine-shaft, the ore ground below the adit being only about 15 fms. west of this flat-rod shaft. I should advise wood or iron flat-rods being properly laid down, instead of the chain now used for sinking with, this shaft being, in my opinion, in a better position than the other for testing this lode in depth, inasmuch as whatever ore is met with will, probably, be found dipping eastward. There is a large tin lode, which may be reached by a cross-cut of 9 or 10 fms. south in the 12, provided it continues to go down at the same rate of underlie as it has where opened on at the surface; it is a large and strong lode, near the surface, and contains some good stones of tin. There are also other lodes to the north of the copper lode, one of which presents near the surface favourable indications for copper, and the sett, altogether, is one deserving a spirited trial.

ST. DAY UNITED.—Joseph Cock, Feb. 4: We are pushing on every department as fast as possible.

ST. IVES WHEAL ALLEN.—J. Nancarrow, J. Daniel, Feb. 9: The lode in Roderick's engine-shaft has improved in appearance, and contains tin to save, but not yet to value. Still, this is important, as we are in all probability getting down into the run of tin ground, through which we have driven several fathoms in the 40 east. The principal part of the tin in the 40 east is dipping as we drive eastward. The lode in the bottom of the end is worth 6l. per fm. There is no change to notice in the 40 west. The east stope below the 20 is worth 4l. per fm.; the west stope is worth 6l. per fm.; the stope in back of the 20 east, 4l. per fm.; and the lode below the 20 west, 6l. per fm.

ST. JUST CONSOLS.—J. Carthew, W. Williams, Feb. 7: We have again resumed the Guide shaft below the deep adit level; the lode in the bottom is looking well. In the end of the shaft we broke 15l. worth of tin since last report. In the shallow level end, on the new lode, the lode is not so rich, but in the stopes under we have a very good lode.

ST. JUST UNITED.—R. Pryor, W. R. Rutter, Feb. 4: The following is our setting for February, and our report:—Saveall's Lode: The sump-winze to sink below the 62, by six men, at 8l. 10s. per fm.; the lode is 3 ft. wide, worth 6l. per fathom. The 62 to drive east of engine-shaft, by two men, at 3l. 10s. per fathom; the lode is worth 3l. per fathom. The 62 to drive west of engine-shaft, by two men, at 3l. per fathom; the lode is worth 5l. per fathom. The 62 to drive east of rise, by two men, at 3l. 5s. per fathom; the lode is worth 4l. per fathom.—North Lode: The north lode shaft to sink below the 74, by six men, at 9l. per fm.; the lode is worth 5l. per fathom. The 74 to drive east of shaft, by two men, at 2l. 15s. per fathom; the lode is worth 5l. per fathom. The 74 to drive west of shaft, by two men, at 2l. 10s. per fathom; the lode is worth 6l. per fathom. The winze to sink below the 62 west of shaft, by four men, at 2l. 10s per fathom; the lode is worth 4l. per fathom. The 62 cross-cut to drive south, by two men, at 2l. 15s. per fathom.—Wheal Owl Lode: The 62 to drive south of Red Dipper shaft, by three men, at 2l. 15s. per fathom; the lode is at present of no value, but a large stream of water is gushing from it, consequently we think the end may be nearing the profitable ground in which the 40 fm. level is already extended. The 50 to drive north of shaft, by two men, at 2l. per fathom; the lode is worth 5l. per fathom. The 40 to drive south of shaft, by two men, at 2l. 15s. per fathom; the lode is worth at present 4l. per fathom. The rise behind the 40 fm. level end, by four men, at 7l. per fathom; the lode is worth 7l. per fathom. The 20 to drive north of shaft, by two men, at 5l. 10s. per fathom; the lode is producing a little tin.—Wheal Venton Lode: The 20 to drive east of Venton shaft, by two men, at 1l. 17s. 6d. per fathom; the lode produces stamping work. We beg to inform you as well that the sales of tin for the past month amount to a little over 20 tons, which pays the full cost, and leaves a moderate balance in favour of the mine. We have also much pleasure in stating that according to the present rate of expenditure (and there is no occasion to increase it) the above quantity, at the present tin standard, will always leave a profit, and should any advance take place in the price, it may be reckoned as all clear gain to the adventurers.

TOLCARNE.—Feb. 8: Field's Lode: The lode in the 60 west is 15 in. wide, consisting of gossan and spar, with occasional stones of ore. In the 50 east the lode is 2 ft. wide, composed of gossan, prian, and good stones of grey ore—a very promising lode. The ground in the 50 fm. level cross-cut north is hard. In the 40 east the lode is 1 ft. wide—unproductive. The lode in the 20 east is 15 in. wide, producing 1 ton of ore per fm., and is kindly for improvement. In the 10 east the lode is 20 in. wide, consisting of gossan, soft spar, and a small quantity of black ore, but not to value. The lode in the adit level east is 16 in. wide, consisting chiefly of gossan and soft spar. The ground in the adit cross-cut south is hard and wet.—New North Lode: In the 40, west of the cross-cut, the lode is 20 in. wide, producing good stones of ore. The lode in the 40, east of the cross-cut, is 10 in. wide, producing 1 ton of ore per fathom. The lode in the 30 east is 10 in. wide—unproductive. The lode in the winze sinking under the 30 is 10 in. wide, producing saving work.

TORBAY HEMATITE IRON.—W. Williams, Feb. 6: We have daily a large quantity of rain, which much impedes our operations. In our western end, from new shaft, there is no change to report, and from the wet weather we are doing but little at the Derrick stopes. We have several vessels chartered, awaiting fine weather.

TRENCROM.—W. Arthur, H. Woolcock, Feb. 9: There is no change in the 110, east of Hollow's shaft, since last report, worth 4l. per fm. The lode in the 100, east of Hollow's shaft, is 2 feet wide, worth 5l. per fm. The lode in the 90, west of Giesler's engine-shaft, is 3 feet wide, worth 6l. per fm. The lode in the 90, east of Hollow's shaft, is 16 in. wide, worth 7l. per fm. The lode in the 70, east of Hollow's shaft, is 10 in. wide, producing a little tin. The lode in the rise above the 50, east of Hollow's shaft, is 15 in. wide, worth 4l. per fm. The lode in the 40, east of Hollow's shaft, is 12 in. wide, saving work for tin.

TREREW WHEAL ROSE.—J. Middleton, Wm. Billing, Feb. 9: We find the water still very quick in Vigur's engine-shaft, and for the present have suspended sinking. The men are now engaged in clearing and reparing the damages caused by the heavy rains, which will take some weeks to repair.

TREVENEN AND TREMENHEERE.—J. Medlen, Feb. 8: The water is all in fork, and things in full operation. The back of the 162, east of the new sump-shaft, is worth 12l. per fm.; this end going east is worth 6l. per fm. The western end has been suspended for a month. Trevenen shaft is worth 10l. per fm. The 162, west of this shaft, is worth 9l. per fm.; the end, east of this shaft, is worth 5l. per fm. No change in the tribute department to call for remark since last report.

VALE OF TOWY.—A. Waters, T. Harvey, Feb. 7: In Field's shaft, sinking below the 110 fm. level, the lode is from 5 to 6 ft. wide, yielding good blende stuff throughout; the ground is not so favourable as when last reported on. In the winze, sinking below the 110, north of said shaft, the lode is 4 ft. wide, yielding rich blende stuff; the ground is loose and favourable for dispatch. We shall soon have a good piece of ore ground cut up to advantage here. No change in the 124, south of Clay's, since our last; the lode is large and productive. The stopemen are breaking fair quantities of blende in the back, behind the said end. The tribute department throughout, on the whole, has improved since our last report for the meeting on Friday last. In consequence of the frost and snow experienced this month, we are behind in our dressing operations. The tribute stuff will be in only in time for us to post the cost-sheet on Thursday next.

WALKHAM AND POLDICE.—John Lean, Feb. 6: At Lamb's shaft, sinking below the 38, there is no change in the ground since my last, the sinking of which is progressing. In the 38, north of shaft, the ground is stiffer, with much spar; the water is flowing freely from the end, which I expect will drain off the water from the 26 above, when we shall commence a winze for the purpose of supplying air and proving the ground through which it passes. In the 26 north the lode is large and strong, producing good slabs of lead ore; to-day we have drawn some fair work from this end, which is more free of blende than heretofore. In driving back, south from the cross-cut in the 26, in search of the wheel-pit copper lode, the ground is congenial for mineral, and good for driving; a little water is issuing from the end. I expect in four or five weeks to throw some light on this point. The machinery is in good working order.

WELSH (Gold).—W. Vincent, Feb. 6: The gold which I have to send you by this post is 17 ozs. 14 dwts. 2 grs., making for the month 26 ozs. 10 dwts. 12 grs. We hope to do much better than this when our railway is finished, and the other battery of stamps put to work, both of which will be completed shortly, it the weather proves favourable. We have eighteen men breaking quartz, some of which is very good, and when we have our machinery working properly, our returns will be greatly increased. I am anxious to get down some quartz from beyond Cefn Coch, where the lode is large, as 1 cwt. of it, taken from under the snow, and passed through the Britten's machine, gave nearly 8 ozs. of gold to the ton. Quartz stamped from the Jan. 14 to 31, 1865, 79 tons, yielding 17 ozs. 14 dwts. 2 grs. of gold, and there has been no gold taken out of the coffers in this return. The company have this week sold 42 ozs. 11 dwts. of gold, yielding 125l. 11s. 1d.

WEST BASSET.—W. Roberts, Feb. 4: The report circulated in this neighbourhood that East Pool levels were into Wheal Agar proves, as I expected, entirely false. I only wish they were up close to, or even a little beyond, their boundary, with the lode as large and productive as it is in their present workings. With the present bearing of the lode, and its north underlie, it cannot, I think, fail to be into the Wheal Agar sett.

WEST BASSET.—William Roberts, Feb. 8: In the 154, east of Thomas's engine-shaft, the lode is 3 feet wide, producing stones of copper ore and a little tin. The lode in the 144 west is 2 feet wide, at present unproductive. In the 124, east of Percy's shaft, the lode is 3 feet wide, producing stones of ore; in the same level west the lode is 4 feet wide, with occasional stones of ore.—Caunter Lode: In the 75 east the lode is small. In the 65 east the lode is 1 foot wide, producing 1 ton of ore per fathom; the lode in the same level east is 1 ft. wide, yielding good stones of ore—tribute ground.—Middle Lode: In the 52 east the lode is producing stones of ore. In the winze sinking under the 52 the lode is 2 ft. wide, producing 1 ton of ore per fm. Other parts are without alteration.

WEST CLIFFORD UNITED.—G. Johns, Feb. 8: The water is in fork to the 30, and the shaftmen are here engaged in making preparations for fixing a plunger-lift. The surface men are employed abaut erecting a horse-whim in the western part of the mine, in order to draw the stuff from the tributers working in this part. We have one pitch working in the bottom of the deep adit level by four men, and another by two men in the back of the 20, each at 13s. 4d. in 1l.; in the former the lode has greatly improved since we commenced working, and is now worth 12l. to 15l. per fm., and we could work it at a more advantageous price but for the quantity of surface water coming down; in the latter we are glad to say the men are getting fair wages. We give these parties rather an extra tribute, in order that they might earn good wages, as an inducement to other tributers to come to the mine, and we hope to set several other pitches shortly We are happy to say the engine works efficiently, and everything here is progressing most satisfactorily.

WEST CONDURROW.—E. Hosking, F. Gilbert, Feb. 9: The following is our setting report:—The 36 to drive east of Purser's shaft by two men and one boy, at 5l. per fm.; the lode in the end is 20 in. wide, consisting of quartz, decomposed granite, and peach, with stones of mundic. A winze to sink below the 24 by four men, at 6l. per fm.; the lode in the winze is 2 ft. wide, and producing saving work for copper. Bickford's shaft to sink below the 24 by six men, at 10l. per fm. The 24 fm. level cross-cut to drive south of Bickford's shaft by two men and two boys, at 4l. 5s. per fm. The deep adit cross-cut to drive north of Bickford's shaft by two men and two boys, at 2l. 15s. per fm. The deep adit level to drive east of Bickford's shaft by two men, at 3l. per fm.; the lode in the end is 20 in. wide, composed of spar, peach, and flookan, with occasional stones of tin. A rise in the back of the deep adit level by two men, at 3l. per fm.; the lode in the rise is 18 in. wide, producing saving work for tin.

WEST FOWY CONSOLS.—F. Puckey, T. Rich, Feb. 7: In sinking Puckey's north shaft below the 150 the lode is 6 ft. wide, and worth for the length of the shaft (12 feet) 15l. per fm.; cost for sinking 27l. per fathom.

WEST SHARP TOR.—William Richards, Feb. 6: Fair progress is being made at Morris's shaft below the 162; the north wall of the lode is well defined, and charged with green carbonate of copper in places. The No. 5 cross-cut, in the 162 west, still yields some good grey copper ore occasionally, and its general character is more encouraging at present. The lode in the rise and stope in back of the 162 west is improved a little since last week, now worth 21l. per fm. The part of the lode now being cut into in the No. 6 cross-cut, in the 162 east, contains hard capel, peach, quartz, and a little mundic and yellow copper ore. The ground in the adit level is a little harder at present.

WEST WHEAL VOR.—J. Southey, Feb. 8: Gundry's engine-shaft is sunk below the adit level 19 fms. 1 ft. 6 in.; the ground is still favourable for sinking, and the water easy; we intend cross-cutting through the lode, to see its character at the 20. Good progress is being made in the adit cross-cut north. The engine and pitwork still continue to work well.

WHEAL AGAR.—W. Roberts, Feb. 7: In the 100, east of Windstow, the lode is 1 ft. wide, composed of spar and stones of ore. The lode in the 90, east of shaft, is 2 ft. wide, producing good stones of ore. In the 90, west of shaft, the lode is 1½ ft. wide, unproductive. In the 60, east of cross-cut, the lode is 1 ft. wide, producing good stones of ore. The lode in the 90, east of western shaft, is 3 feet wide, composed of flookan, mundic, and prian, a promising lode.—Dobree's Lode: In the 90, east of cross-cut from the western shaft, the lode is 1 foot wide, producing stones of ore. In the 90, west of cross-cut from whim-shaft, the lode is 1½ ft. wide, composed chiefly of spar. The sinking of the whim-shaft below the 110 is progressing favourably; the lode is 1 ft. wide, principally flookan. The lode in the 80, east of whim-shaft, is 1 ft. wide, composed of spar, flookan, and a little tin. Other parts of the mine are without alteration worth notice.

WHEAL CREBOR.—J. Gifford, Feb. 7: In the 108, both east and west, driving by the side of the lode, the former is in 8 ft., the latter 5 ft. The sumpmen are now engaged in taking down the ground under the Punch pit, and putting in skip-road, which we hope to complete by the end of the week. In the 96 end, both east and west, no change to notice. The stope in back of 96 west is worth 25l. per fm. In the cross-cut south, west of Cock's shaft, in the 96, the ground is favourable for driving, and we are making good progress. The stope in bottom of the 84 east, east of Hoskins's winze, is worth 15l. In the 84 east the lode reported last week worth 2 tons of ore per fathom appears to be standing all south of our driving; the same, so far as seen, is 2½ ft. wide, saving and very promising. In the 72 east the lode went out with a splice, and another making in the end about 1 ft. wide, saving work. From its present appearance I think it will soon become as productive as the last 8 fms. driven through. In the 48 east the ground is easy for driving. No change in the tribute department.

WHEAL EDWARD.—G. Rowe, Feb. 4: The lode in the 61 west is looking exceedingly kindly, being 2½ ft. wide, in which are large vughs, containing mundic, gossan, and good quality yellow copper ore to the amount of 1 ton per fm. The carbonic gas is pouring forth through the fissures of the lode very strong, which indicates something of importance ahead. The stoping in bottom of the 61, east from engine-shaft, is progressing as fast as the nature of the work will admit.

WHEAL GRENVILLE.—G. R. Odgers. W. Bennetts, Feb. 4: There is no change in the 120 west. The men are engaged stripping down the lode in the 110 east; they are in it 2 ft., without any north wall, and which is producing good stones of tin. The lode in the 110 west is from 4 to 5 ft. wide, and producing good work for tin, worth from 12l. to 14l. per fm. Two stopes above this level are worth 15l. per fm. each. The lode in the 100, east of new shaft, is producing good work for tin, worth from 10l. to 12l. per fathom. A stope above this level, where the lode is large, and producing tinny work, worth 10l. per fm. The lode in the winze sinking below the 100 west is 4 ft. wide, producing good work, worth 10l. per fm. The lode in the stope above this level is worth from 10l. to 12l. per fm. The lode in the winze sinking below the 90 east is from 4 to 5 ft. wide, yielding good work for tin, worth from 10l. to 12l. per fm. Two stopes above this level—the lode in each is worth 10l. per fathom. The lode in the 90 west is small. The lode in the stope above this level is worth from 8l. to 10l. per fm.

WHEAL GRYLLS.—E. Rogers, J. Pope, Feb. 9: Fisher's Lode: The 40 fm. level is driving east of Annie's engine-shaft by six men, at 4l. 10s. per fm.; the lode is 2 ft. wide, and will just pay for driving. At this level, driving west, the lode is 18 in. wide, worth 2l. per fm.; price for driving, 2l. 10s. per fm. The back of this level is stoping by six men, at 2l. 10s. per fm. The lode is 2 ft. wide, worth 10l. per fm. The 30 fm. level is driving east of Grylls shaft, by four men, at 3l. per fm. The lode is small and poor. Pressure shaft is sinking below the 20 fm. level, by six men, at 4l. per fm.: no lode has yet been taken down. The 10 fm. level is driving west of Jones's whim-shaft by two men, at 1l. per fm., and 10s. in the 1l. for tin. The lode is 1 ft. wide, worth 2l. per fm.—Standard Lode: At the 10 fm. level, driving west of the Western shaft, the lode is 4 ft. wide, worth 3l. 10s. per fm.: price for driving, 5l. per fm. The 12 fm. level from surface is driving east of Badger's shaft by two men, at 1l. per fm. The lode is producing occasional stones of tin, but not sufficient to value.—Georgia Lode: The 30 fm. level is driving south by four men, at 1l. 15s. per fm.: the lode is a little improved, and is now worth 3l. per fm. At this level we have commenced cross-cutting west by four men; price for driving, 3l. per fm.

WHEAL HARRIETT.—S. Williams, Feb. 4: The lode in the 130 east end is still worth for tin 6l. per fm. The lode in the 115 east end, from western cross-cut, is producing stones of copper ore. The lode in the 115 west end, from east cross-cut, is worth for copper ore 5l. per fm. The lode in the stope above this level is worth 6l. per fm. The ground in the 90 north cross-cut is moderately easy for driving.

WHEAL HOPE.—D. Reece, Feb. 7: The 85 we have not seen since our last, in consequence of the water, we are still keeping it to the 65; we hope in a few days we shall be able to hang in again. In the 65 west the lode is small, with little lead, but not enough to value. In the 118 east no lode taken down.

WHEAL LUDCOTT AND WREY CONSOLS.—R. Knapp, Feb. 9: Willcock's shaft is sunk 4½ fms. under the 116; the ground is a little improved for sinking, and looks as if it would further improve shortly. The lode in the 116 south is 3 ft. wide, and will produce 9 cwts. of lead per fathom. In the same level north we have intersected the cross-course, and are now driving west to intersect the lode on the other side of it, and which we expect to accomplish in a few days from this time. There are six stopes in the back of this level, which will produce on an average 6 cwts. of lead per fathom. The lode in the 106 north is 3 ft. wide, and will produce 5 cwts. of lead per fathom. The stopes in the back of this level will produce on an average 7 cwts. of lead per fathom. Wrey's shaft is sunk to the 140; we have commenced the cross-cut at this point towards the lode, and have about 3 fathoms to reach it. The lode in the 130 south is 2 feet wide, and will produce 5 cwts. of lead per fathom. In the winze sinking under this level the lode is 4 ft. wide, and will produce 6 cwts. of lead per fathom. In the winze sinking under the 106 south the lode is 3 feet wide, and will produce 5 cwts. of lead per fathom. In the 116, north of the winze, the lode is 2 feet wide, and will produce 3 cwts. of lead per fathom. The pitches throughout the mine are producing their usual quantity of ore.

WHEAL MARGERY.—R. James, Wm. Rogers, Feb. 9: Wellesley's shaftmen have laid down the skip-road to the 122, and are now cutting plat at that level. In the 70 west the lode continues without sufficient mineral to value. The American shaftmen are engaged in fixing skip-road from the 132 to the 142. The 142 is driven east 6 feet; the lode is not producing enough ore to value. In the 132 west the lode is poor; No. 1 stope in the back is worth 5l. per fm.; No. 2 ditto 7l. per fm.; No. 3 ditto 4l. per fm. In the 132 east the lode is worth 3l. per fm.; No. 1 stope in back is worth 9l. per fm.; No. 2 ditto 8l. per fm.; No. 3 ditto 8l. per fm. The lode in the winze in bottom of the 122 west is worth 3l. per fm.; Nos. 1, 2, and 3 stopes in the back of the 122 west are worth 5l. per fathom each. In the 122 east the lode is worth 3l. per fm.; Nos. 1 and 2 stope in back of the 122 east are worth 7l. per fm. each. The stope in back of the 110 east is worth 8l. per fm. The stope in back of the 110 west is worth 8l. per fm. In the 100 west the lode is producing stones of ore; No. 1 stope in back is worth 6l. per fm.; No. 2 ditto is worth 5l. per fm.; No. 3 ditto is worth 8l. per fathom. No other change since our last report.

WHEAL MARY HUTCHINS.—W. Edwards, Feb. 6: The ground in the deep adit going north has now become most favourable for driving; now let at 2l. 15s. per fm.; the takers to pay all cost, having lately given 12l. per fathom. I have just dialled the ground, and find we have about 11 fathoms further to drive to intersect the great copper lode, without any different change in the underlie. The shallow adit going east is now cleared and secured about 90 fms.; I find the lode in this driving to be very large, and of a most promising description, giving every indication of making a rich lode in depth.

WHEAL NORRIS.—John Andrews, Feb. 4: The sinking of Carter's shaft is not progressing so fast as it has been, in consequence of the soft ground in the south side of the shaft, referred to in former reports, having made a turn back south, but this change I regard as temporary, as we have had similar changes before. In the 45 cross-cut south the ground is much the same as when last reported on. In the 35 cross-cut north the ground is a little tighter, now driving at 3l. 10s. per fm. No change in either of the 35 ends, driving east and west of cross-cut, on new lode.

WHEAL PROSPER.—S. Mitchell, Feb. 9: The 40 driving east on branch towards the point of junction with Trewavas lode is progressing fast; the ground is becoming softer, and letting out more water, which are strong indications of being near the lode. The lode at the new shaft is 18 in. wide, producing good work for tin, and of such promising character as, I think, will be found highly productive in depth, but in consequence of heavy rains, the water has risen so as to prevent our working at the bottom, where the lode is of most value; but, judging from the porous nature of the lode, I am of opinion it will soon be drained after it is intersected at the level below.

WHEAL SIDNEY.—W. Edwards, Feb. 7: The ground in the cross-cut going north at the 46 still continues most favourable for driving; water still issues from the end with great force. I regret to say the late heavy rains have caused the water to rise in the bottom of the mine, which has caused for the present a suspension of some of the tribute pitches, therefore we have deemed it advisable to work the steam-engine.

WHEAL SPARNON.—E. Chegwin, Feb. 4: Sump: The sumpmen have made good progress fixing plunger-lift at the 20. The water is 3 fms. above the 20. All the tutworkmen have been to capstan, sending down pitwork.

WHEAL TRELAWNY.—Capts. Johns, Grenfell, and Pryor, Feb. 4: We have entirely cut through the lode in the 196 fm. level cross-cut, east of Smith's engine-shaft, and we are pleased to say that it is a very kindly looking lode; and in order to prove it, and lay open ground speedily, we have to-day set a winze to sink below the 182; this will have our due attention, and be pushed down as fast as possible. In the 182, north of this shaft, the lode is showing an improved appearance as we are approaching the ore ground gone down in the level above. In the 182, south of this shaft, during the past month we have been working by the side of the lode, but we feel it a pleasure to say we have again cut into the lode, and find it of the same value as last reported on, worth 30l. per fm. We are making good progress in sinking the winze below the 172, by the side of the lode; in advance of this end, the 182, no lode will be taken down or cut into before a communication is effected; last valued at 10l. per fathom. In the 153 and 142, south of Trelawny's shaft, and the 78, north of Chippendale's shaft, in each of these ends we are breaking good stones of ore. All other tutwork bargains are progressing as fast as the nature of the ground will admit. Our tribute pitches, on the whole, are looking pretty well. The last sale (computed 50 tons) weighed off 52 tons 16 cwts. 3 qrs., realising 1552l. 5s., and we shall again sample about 50 tons at our usual time.

WHEAL TREVENNA.—T. Jennings, Feb. 7: Where the caunter lode formed a junction with our east and west lode in the 15 fm. level, east of Highborough shaft, the lode is 12 ft. wide; it is composed of peach, prian, spar, and rich for tin. I hope by next week to be able to let you know about the size of each lode. This is a great improvement to our mine; there is another caunter about 50 fms. ahead of us, which I expect to find, when intersected, rich for tin. Our small stamps are working well. The

MUNTZ, E. G., METAL BROKER,
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The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—London, Feb. 10, 1865.

COPPER.	£	s.	d.	£	s.	d.
Best selected....p. ton	89	0	0-	90	0	0
Tough cake..... „	87	0	0-	88	0	0
Tile ..... „	87	0	0-	88	0	0
Burra Burra .... „	92	0	0-	—		
Copper wire .....p. lb.	0	1	0-	1	0	¼
ditto tubes ..... „	0	1	1-	—		
Sheathing & bolts p. ton	91	0	0-	95	0	0
Bottoms ..... „	100	0	0-	—		
Old (Exchange)..... „	91	0	0-	—		

IRON.	Per Ton.					
Bars Welsh, in London..	7	5	0-	7	10	0
Ditto, to arrive	7	5	0-	—		
Nail rods	8	10	0-	—		
„ Stafford. in London	8	15	0-	9	15	0
Bars ditto	9	0	0-11		0	0
Hoops ditto	9	15	0-10		10	0
Sheets, single	10	10	0-11		0	0
Pig No. 1, in Wales....	4	10	0-	—		
Refined metal, ditto....	4	0	0-	5	0	6
Bars, common, ditto....	6	15	0-	7	0	0
Do., merch., Tyne or Tees	7	10	0-	—		
Ditto, railway, in Wales	6	10	0-	7	0	0
Ditto Swed. in London.	11	10	0-12		0	0
To arrive	12	0	0-	—		
Pig, No. 1, in Clyde....	2	11	0-	2	16	0
Ditto, f.o.b. Tyne or Tees	2	9	6-	—		
Ditto, Nos. 3, 4, f.o.b. do.	2	6	6-	2	5	6
Railway chairs.....	5	10	0-	5	15	0
„ spikes.....	11	0	0-12		0	0

LEAD.						
English Pig, ordny. soft	20	7	6-	—		
Ditto (WB)	21	10	0-21		15	0
Ditto sheet	21	6	0-	—		
Ditto red lead	22	0	0-	—		
Ditto white	26	0	0-26		5	0
Ditto patent shot.....	23	0	0-	—		
Spanish	19	10	0-	—		

BRASS.	Per. lb.
Sheets	9¼d.- —
Wire	9d.- —
Tubes	9¾d.- —

STEEL.	Per Ton.					
Swedish, in kegs (rolled)	15	10	0-15		16	0
„ (hammered).	16	0	0-18		0	0
Ditto in faggots.....	17	0	0-18		0	0
English, Spring	19	0	0-23		0	0
Bessemer's, Engineers Tool	44	0	0-	—		
„ Spindle	30	0	0-	—		
Quicksilver (per bottle).	8	0	0	nom.		

SPELTER.	Per Ton.					
Foreign	19	5	0-19		7	6
To arrive	19	10	0-19		12	6

ZINC.						
In sheets	24	10	0-	—		

TIN.						
English, blocks	97	0	0-	—		
Ditto, Bars (in barrels)..	98	0	0-	—		
Ditto, Refined 100		0	0-	—		
Banca	96	0	0-	—		
Straits	89	10	0-	—		

TIN-PLATES.*						
IC Charcoal, 1st qua. p. bx.	1	7	0-	1	10	0
IX Ditto 1st quality „	1	13	0-	1	16	0
IC Ditto 2d quality „	1	5	0-	1	7	0
IX Ditto 2d quality „	1	11	0-	1	13	0
IC Coke ..... „	1	1	6-	1	2	9
IX Ditto..... „	1	7	6-	1	8	9
Canada plates ....p. ton	13	10	0-	—		
In London; 20s. less at the works.						

Yellow Metal Sheathing...p. lb.	8d.-	8½d.
Sheets.....p. lb.	8d.-	8½d.
Indian Charcoal Pigs in London	7 0 0-	7 10 0

* At the works, 1s. to 1s. 6d. per box less.

Remarks.—Although the Metal Market continues remarkably devoid of interest, and the want of business is seriously felt by almost all connected with the metal trade, yet during the past week there has been a little more of life manifested, and the dulness has not been quite so general as it has hitherto been. A few more orders have been given out, and there appears to be rather more enquiry in the market, which it is hoped will lead to more satisfactory results, though it is now very evident that the return of animation and activity will be very gradual. The satisfactory relations in which this country at present stands with all foreign powers, as referred to in the Queen's Speech, is very gratifying, and it is earnestly to be hoped that this peaceful state of things will continue, and that our commercial relations with other countries will not be disturbed, and that this year no war may arise to interfere with the commerce of the country. The news from India is not altogether of a satisfactory kind as regards metals; they are stated to be steady, but there is very little demand for them at present. The money market there, however, is much easier, and the increased ease of the market here is expected to have a very beneficial effect in India. We sincerely trust that this will be the case, and that ere long there will be a return to that activity in metals which formerly characterised our commercial relations with that important part of the empire.

Copper.—The demand has again fallen off, and but little business is doing. Prices may now be quoted as 94*l.* to 95*l.* for sheets, and 87*l.* to 88*l.* for ingots, &c. Chili has been sold at 80*l.*

Iron.—In Staffordshire there is a slight improvement in the orders given out for iron, though as yet they are far from sufficient to keep the works in full operation. A few orders have come from Baltic ports in anticipation of the breaking up of the ice, and these will probably increase. At present the demand for the United States shows no recovery, and this is the main cause of the present slackness. In Welsh the iron trade remains much as it was last week, and prices show no material alteration. Buyers on American account report no improvement as yet in the enquiry from the country, although the present agitation in favour of peace is looked upon as an indication that before long there will be a better demand. The wages question has not been so satisfactorily arranged at two or three works as was generally expected, but it is hoped that the partial turn-outs which have taken place will soon be put an end to. The exports have been small for the last few days, and for the week ending the 2d inst. reached only 556 tons. In Swedish there is a still further improvement, and holders are looking for better prices. The Scotch pig-iron market has again fluctuated rather more during the week, but has eventually declined. At the commencement of the week prices stood at 50*s.* 1½*d.* cash, and 50*s.* 4½*d.* one month, but soon advanced to 50*s.* 3*d.*, 50*s.* 4½*d.* cash, and 50*s.* 6*d.* to 50*s.* 9*d.* one month, but soon declined again to 50*s.* 1½*d.* cash, and 50*s.* 4½*d.* one month, at which, however, a good business was done. The last advices report a still further decline to 47*s.* 10½*d.* cash and 50*s.* 1½*d.* one month, but towards the close the market was a shade firmer, sellers asking 50*s.* cash and 50*s.* 3*d.* one month.

Lead is again quiet, and prices somewhat easier; they may now be quoted as 20*l.* to 20*l.* 5*s.* for common English pig, 20*l.* 7*s.* 6*d.* for LB, and 21*l.* 10*s.* to 21*l.* 15*s.* for WB.

Tin.—The improvement noticed last week in foreign has not been maintained, and prices have again become lower; business has been done in Straits at 90*l.* 10*s.*, then at 90*l.*, and has since dropped to 89*l.* 10*s.* cash, at which it now stands. Banca may still be quoted at 96*l.*

Spelter.—The market has continued still further to advance, and business has been done at 19*l.* 5*s.* to 19*l.* 7*s.* 6*d.* on the spot, and at 19*l.* 10*s.* to 19*l.* 12*s.* 6*d.* for spring delivery.

Steel.—No improvement has yet occurred.

Tin-Plates.—The orders in the market are rather more numerous than a short time since.

Quicksilver remains at the price quoted.

Glasgow, Feb. 9.—The market is firm. There are sellers at 49*s.* 11*d.*, buyers at 49*s.* 10½*d.* No. 1, g.m.b., 51*s.*; No. 3, 50*s.*

Birmingham, Feb. 10.—Rylands' "Iron Trade Circular" reports—There is decidedly more enquiry. A better feeling, and more business doing, but buyers are pulling down in prices, which, however, stand nominally as last quoted.

THE LIVERPOOL METAL MARKET—Feb. 9.

[FROM OUR CORRESPONDENT.]

The Metal Market, on the whole, continues seriously depressed, with little immediate prospect of improvement. The home trade is the only redeeming feature, for most large home consumers are giving out very fair orders. The export trade, with the exception of coke tin-plates has been *nil* for the whole current week.

Pig-Iron.—Fluctuating from 49*s.* 9*d.* to 50*s.*; very little business doing.

Manufactured Iron.—Some few of the list houses manage to keep up their prices, but underselling prevails, and good specifications of most best marked brands of Staffordshire bars can be bought at 10*s.* to 15*s.* per ton under list prices. The wages question is at an end, so far as South Staffordshire and South Wales are concerned, and there can be little doubt that North Staffordshire and all the other new districts will follow suit. The demand for Welsh bars is still slack, with prices perhaps a trifle lower. On the whole, the market has slightly improved since our last, and a few tidy export orders have been given out.

Tin-Plates.—There has been a somewhat better demand this week, chiefly in cokes for the Mediterranean. But little enquiry for the States. Charcoals continue flat, and makers will gladly book orders at 25*s.*, IC. Cokes quoted at 21*s.*, f.o.b.

Lead.—Prices tolerably firm, with a quiet market.

Tin.—The news from Holland has slightly improved the demand here as elsewhere; but there is nothing solid in it, being a mere temporary spirt; stocks are far too heavy to sustain any prolonged advance in prices; Straits afloat has been done at 90*l.* to 91*l.*, three months. The demand for English is but limited compared with foreign, and can be bought at 3*l.* to 4*l.* below makers' lists. We are of opinion that tin will see a much lower price than the present, and that before very long.

Spelter.—Some good sales are reported from London, but nothing much has been done here; holders are somewhat firm, at 19*l.* to 19*l.* 5*s.*

Copper.—The market is slightly improved, but no sales worth naming have taken place.

Imports of Metals and Ores for the Week ending Feb. 4:—51,537 quintals copper ore, 2516 quintals copper regulus, 2854 bars copper, 1072 bags copper and silver regulus, 4468 bags silver ore, 156 bags lead and silver ore, 400 cantars brimstone, 2174 bars iron (from St. John's, New Brunswick), and 10 bundles zinc.

Exports for the Week ending Feb. 4:—

Bars .....Tons	2090	Pig .....Tons	772
Rods	87	Plates	456
Hoops	311	Rails	658
Sheet	187		

The spirits of the tin miners have been a little revived this week by the advance in foreign tin, and the postponement of the Dutch sale till June. In the meantime it is hoped and expected, as stocks on hand get low and trade revives, that English tin may also advance. In the Mining Share Market moderate activity prevails, without excitement for any particular mine, as is usually the case. Frank Mills, 6½ to 6¾, ex div.; at the meeting, held on Thursday, a dividend of 6*s.* per share (1500*l.*) was declared, leaving a balance in hand of 1960*l.* 10*s.* Full and satisfactory reports were submitted to the meeting, and the proceedings will be found *in extenso* in another column. Clifford Amalgamated shares have advanced to 31, 32; Central Minera shares in good demand, at 35*s.* to 40*s.*, and likely to go much higher. East Caradon shares are firmer, and leave off 13½ to 14¼; the caunter lode, in the 80 east, is worth 18*l.* per fathom; the 80 west, 18*l.* per fathom. Cook's Kitchen, 8¼ to 9¼; East Basset, 30 to 32½; East Carn Brea, 6½ to 6¾; East Lovell, 12½ to 13; East Russell shares in better demand, at 4¼ to 4½; Great Laxey, 17½ to 18; Great North Laxey, 3 to 3¼, and a large business done at these prices; Great South Tolgus, 2½ to 2¾; Great Wheal Vor, 33 to 34.

East Grenville, 3¼ to 3¾, call paid; at the meeting, on Friday, the accounts showed a balance of liabilities over assets of 887*l.* 0*s.* 6*d.*, and a call of 3*s.* per share was made. The report states that the returns for the next quarter would, probably, be the same as the last (900*l.*), while the costs would be less. The 75 west was in two parts; the south part worth 1 ton of copper ore per fm., and the horse of elvan between the two parts of the lode worth 20*l.* per fathom for tin. The 65 west, which has been driven west 59 fms., is worth in the end 3 tons of copper ore, and a little tin, altogether 14*l.* per fm., and driving at 5*l.* The winze below the 65 is poor. Hallenbeagle, 3¼ to 3½; Hingston Down, 3¾ to 3⅞; Marke Valley, 5 to 5¼. Mineral Bottom shares in demand, at 5 to 6; we stated last week that the mine was considered the best speculation around West Chiverton, but are not aware whether the present demand is owing to any discovery. Nangiles, 16 to 18; Birch Tor and Vitifer, 1¾ to 2; North Downs, 2⅜ to 2½; North Roskear, 14 to 16; North Treskerby, 1¾ to 2¼; New Wendron, 3 to 3½; Wheal Hartley, 10*s.* to 15*s.*; Wentworth, 8 to 8½; Prince of Wales, 2*s.* to 4*s.*; Prosper United, 3¼ to 3¾; Providence Mines, 32 to 34; Sithney Wheal Metal, 2¼ to 2½; South Condurrow, 28*s.* to 30*s.* Carn Camborne, 20*s.* to 22*s.* 6*d.*; the 40 west, on the south lode, is worth 3 tons of ore per fathom; the 30 west, 2 tons. South Crofty, 11¼ to 12½; South Lovell, 1¾ to 2¼; St. Day United, 14*s.* to 16*s.*; Stray Park, 11 to 12; Tincroft, 15 to 16; West Caradon, 7½ to 8½; West Seton, 200 to 205; West Tolgus, 59 to 61; Wheal Chiverton, 5¾ to 6; Wheal Crebor, 37*s.* 6*d.* to 40*s.*; Wheal Grenville, 2¾ to 3; Wheal Seton, 197½ to 202½.

Wheal Trelawny shares, 19 to 20, and in demand. Wheal Unity, 4*s.* to 6*s.*, and in good demand. Wheal Uny, 2 to 2¼. West Chiverton, 63 to 66; the lode in the 90 has been cut into another foot, and now valued altogether at 70*l.* per fathom. The sale of ore on the 8th was 36 tons, at 20*l.* 9*s.* 6*d.*; 34 tons, at 20*l.* 10*s.* 6*d.*; 50 tons, at 8*l.* 15*s.* 6*d.*: total, 1873*l.* 14*s.* Wheal Basset, 100 to 105; at the meeting, held on Tuesday, the accounts showed a profit on the two months of 902*l.* 1*s.* 8*d.*, and a dividend of 2*l.* per share (1024*l.*) declared, leaving 1346*l.* 12*s.* 9*d.* in hand. The report is favourable. The engine-shaft on the lode is down 8 fms. 4 ft. below the 150, and indicates a more favourable appearance for the production of mineral. Rosewarne United, 29 to 31, and the mine looking well.

On the Stock Exchange transactions in Mining Shares have been of a very limited extent during the week. The following quotations were officially recorded in British Mining Shares:—West Chiverton, 64, 63; Great Wheal Vor, 33¼; Great South Tolgus, 17. In Colonial Mining Shares the prices were:—Cape, 11¼, 11⅜, 11⅛, 11¼; Yudanamutana, 1¾, 2; Yorke Peninsula, ⅜; Dan Mountain. In Foreign Mining Shares the prices were:—Cobre, 29; Alamillos, 1⅛; United Mexican, 4¼; Santa Barbara, ⅝, ¾; St. John del Rey, 33.

Coal Market.—On Monday, the 12 arrivals were all steamers with Government and contract coals, and not a single cargo of house coal for sale. Hartley's were dull at slightly lower prices.—On Wednesday, there were 19 arrivals. The few cargoes of house coal were all cleared off at rather higher prices than last week. Hartley's firm at fully Monday's quotations.—On Friday, 80 fresh ships arrived. There was an active demand for house coal, at an advance of from 1*s.* to 1*s.* 6*d.* per ton. Hartley's dull at last prices. Haswell Wallsend, 20*s.* 9*d.*; Lambton Wallsend, 20*s.* 6*d.*; Stewart's Wallsend, 20*s.* 6*d.*; Braddyll's Hetton Wallsend, 19*s.* 6*d.*; Eden Main, 19*s.* 6*d.*; Framwellgate Wallsend, 18*s.* 6*d.*; Belmont Wallsend, 18*s.* 3*d.*; Gosforth Wallsend, 18*s.* 3*d.*; Wharncliff Wallsend, 18*s.* 3*d.*; West Hartley, 14*s.* 6*d.*: 3 cargoes unsold; 25 ships at sea.

Contract for Coal.—The Admiralty require the supply of 600 tons of South Wales Coal, for the steam-ships at the Piræus.

At Redruth Ticketing, on Thursday, 2486 tons of ore were sold, realising 12,943*l.* 3*s.* The particulars of the sale were:—Average standard, 118*l.* 15*s.*; average produce, 6¾; average price per ton, 5*l.* 4*s.*; quantity of fine copper, 166 tons 12 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Jan. 12....	2308	£128 10 0	6	£4 19 0	16s. 6½d....	£82 14 0
„ 19....	4876	135 8 0	5	4 1 0	16 1¼	80 12 6
„ 26....	3317	122 18 0	5⅛....	4 10 6	15 3¼	76 10 0
Feb. 2....	3105	120 11 0	6⅛....	4 19 0	15 6½	77 11 6
„ 9....	2486	118 15 0	6¾....	5 4 0	15 6⅝	77 11 6

Compared with last week's sale, the standard has slightly declined. Compared with the corresponding sale of last month, the decline has been in the standard 5*l.* 10*s.*, and in the price per ton of ore about 7*s.*

At the Swansea Ticketing, on Tuesday, 1294 tons of copper ore were sold, realising 13,952*l.* 7*s.* The particulars of the sale were—Average standard, 100*l.* 3*s.*; average produce, 13; average price per ton, 10*l.* 16*s.*; quantity of fine copper, 168 tons 4¼ cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Jan. 24	1790	£ 98 1 6	17⅜....	£14 17 0	17s. 0½d....	£85 5 0
Feb. 7	1294	100 3 0	13	10 16 0	16 7	83 0 0

Compared with the last sale, the decline has been in the standard 2*l.*, and in the price per ton of ore about 5*s.* 2*d.* Of the 1294 tons sold on Tuesday, 447 tons were British ores, which gave an average produce of 11¼, and sold at an average standard of 102*l.* 15*s.* 6*d.*=9*l.* 11*s.* 6*d.* per ton of ore; the remaining 127 tons were foreign ores, which gave an average produce of 13¾, and sold at an average standard of 99*l.* 1*s.* = 11*l.* 8*s.* 6*d.* per ton of ore. There will be no sale on February 21.

Parys Mines (Anglesey) declared a dividend of 12*l.* 10*s.* in January, making the total dividends now paid 135*l.* per share.

At Wheal Basset meeting, on Tuesday, the accounts showed a credit balance of 2370*l.* A dividend of 1024*l.* (2*l.* per share) was declared, and 1346*l.* carried to credit of next account.

At Herodsfoot Mine meeting, on Tuesday, a dividend of 35*s.* per share was declared.

At the Frank Mills Mine meeting, on Thursday (Mr. J. Y. Watson, F.G.S., in the chair), the accounts showed a credit balance of 3460*l.* A dividend of 1500*l.* (6*s.* per share) was declared, leaving a balance of 1960*l.* to be carried forward to the next account. Details in another column.

At the Wheal Kitty (St. Agnes) meeting, on Feb. 4 (Col. W. Clarke in the chair), the accounts showed a credit balance of 695*l.* 17*s.* 9*d.* A dividend of 3*s.* per share was declared. Details in another column.

At South Basset meeting, on Tuesday, the accounts showed a loss on the six months' working of 946*l.* A call of 2*l.* per share was made.

At the Pendeen Consols Mine meeting, on Tuesday (Mr. J. Bawden in the chair), the accounts for the quarter ending with the 2oth of December showed a loss of 180*l.* 4*s.* 7*d.* The general balance-sheet showed a debit balance of 408*l.* 6*s.* A call of 3*s.* per share was made.—The Chairman mentioned that it was expected the adit level would soon cut some of the east and west lodes. They had been driving for some years to reach them, and now, they thought, they were within a few fathoms of some of them. Another object in driving the adit level so continuously had been to take away the surface water, and thus relieve the engines.—Mr. M'Callan enquired if there had been raised during the quarter as much tin as expected?—The Chairman said that

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Great North Laxey.—During the week this mine has continued to attract much attention. In answer to an enquiry, Capt. Rowe, the manager of Great Laxey, writes—"The new or east lode in Great Laxey, and now so productive, is, without doubt, Great North Laxey lode." It may also be mentioned that some time ago, when the shaft was down about 3 fathoms below the 50 fathom level, the mine was inspected by Capt. Henry James, of Redruth, who remarked: "The lode in the bottom of the shaft is in the south end 4 feet wide, and in the north end 2½ feet wide, composed of lead, soft quartz of a very friable nature, and of a very light coloured clay-slate. The principal part of the lead is found in a leader, on the footwall, varying in size from 1 inch to 4 inches, and producing (for length of shaft) from 1½ to 2 tons of lead per fathom. A decided improvement has here taken place in the lode and in the character of the stratum, and this improvement was first seen from 3 to 4 fathoms above the 50 fathom level." Captain James also stated—"I look at the chances in North Laxey to be *exceedingly favourable*." Since then the shaft has been sunk to 7 fathoms below the 60 fathom level, the lode gradually improving in depth; while the 60 has been driven 14 fathoms south, nearly all in ore ground, and much better than in the levels above. The adit level is also being driven south towards Great Laxey, and will gain immense backs, Capt. Rowe expressing his firm belief that "Its progress cannot fail to develope fresh and important discoveries of ore." Already this seems to be on the eve of taking place, for in Capt. Rowe's official report received this week, he says:—"The lode in the adit is improved; when it was begun it was small and poor, and now it is 1 foot wide, containing a nice mixture of lead, in a lively quartz and gossan." The shaft also continues in a productive lode, and the 60 end south is "in an unusually promising lode (compared with anything before seen in this mine), fully 3 feet wide, containing jack and lead."

Maudlin Mines, and other Mines on the East Flank of the St. Austell Granite Range.—I find that in the *Mining Journal* of 1858 frequent mention was made of these mines by a writer, who seems to have travelled about that time over the Fowey Consols Mining district, and over all the eastern flank of the St. Austell granite range. In speaking of Fowey Consols, he says—"This great mine, worked on upwards of 20 lodes, has, in about one mile in length, produced sufficient copper ore to pay for all the numerous miles of levels there driven, all the machinery and labour required to carry out such an extensive undertaking, and has also given upwards of 250,000*l.* in dividends. It has built up the insignificant hamlet of Tywardreath into a thriving and extensive village, and the still smaller place of St. Blazey into an important market town, besides the numerous villas scattered in unusual exuberance for many miles around, and has provided the capital which, in combination with the genius of a Treffry, raised Par from a fishing cove into a seaport for a large amount of the coasting trade connected with this great mining district. It has made canals and railways over the most abrupt hills, and across valleys by substantial viaducts, opening up the internal resources of the county in a manner which otherwise could not have been done. It has supplied the capital, too, for the extension and decoration of Place House, the historical residence of the Treffrys (of which there are some stirring reminiscences), so that it not only exceeds its ancient splendour, but has become a wonder, and a palace fit for kings; while it has provided the means of opening other mines in the neighbourhood, second only to itself, which is hale and wealthy, as of yore." Of the more northern part of this district the same writer remarks—"On the east flank of the St. Austell and Luxulian granite range, extending away from Fowey Consols north to Bodmin, is a vast field for experimental mining, so far as geological position goes second to no other, whether we go within or without the magic line. In the crystalline or in the stratified rocks there is abundant evidence, even to an observer at surface, of the high mineralisation of the country all around, in the tin stream, in the iron stains in the gossan lodes, with spots of copper and tin ore, and in numerous other indications. Here are the same variety of strata in which the lodes in Fowey Consols and the south mines have been so abundantly productive." In Maudlin the same writer appears to have gone deeper than the surface, however, for he says—"On arriving at Maudlin, the first man we meet is Captain Tregay, who appears highly delighted at having the opportunity of showing strangers all the mysterious phenomena in this extraordinary mine. From the description given in the columns of your Journal we had expected something extraordinary, but nothing approaching what we really did find. This mine baffles all powers of description. Imagine a vast subterranean mansion, with a fabulous number of rooms, into which might be introduced, entire, a few of the boasted dwellings of the great: all these mighty halls having been excavated by the ancients for copper and tin, evidences of which are now to be seen on the glittering walls around, to which fragments of ancient riches still cling, in an eternal grasp, showing, in some places, like burnished gold. Imagine this, with passages, galleries, vaults, and yawning chasms, descending into darkest regions, where light seldom now penetrates, your mind will then fail to realise (without actually going there) the impressions, never to be effaced, made upon us on our first exploration of those mighty caverns. In vain we endeavoured to trace out any connecting link to serve as a clue to this extraordinary series of formations. We were as completely lost as in the labyrinth of the Minotaur. On noticing our difficulty, the Captain's book was out in a twinkling, and under his pencil everything became, in a few moments, as plain as noonday. 'But how do we know that this is correct?' 'You must either re-examine for yourselves, or take my word for it, until we reach the surface, when I will show you the plans from actual diallings.' These we afterwards had the advantage of examining, and found that the engine-shaft is being sunk at the same angle as the ore ground has dipped all the way from surface. Towards the bottom of the mine this shaft has passed through immense masses of gossan, under which the present company confidently expect, with every reason for this expectation, a repetition of similar masses of ore found so abundantly by the old men under the similar gossan showing itself at surface." This is a case where, if the people in the neighbourhood duly understand their own interest, they will benefit themselves by taking a good round share, with the certainty of profiting largely thereby." This, written so many years ago, if taken in connection with the present discoveries, will appear to have been written by a true prophet, who, if in the land of the living, must feel gratified at seeing his expectations so fully realised.

The Probable Duration of our Coal Supply.—Under the title of "The Coal Question: an Enquiry concerning the Progress of the Nation, and the probable Exhaustion of our Coal Mines." Mr. W. S. Jevons, of Owen's College, Manchester, is about to issue, through Messrs. Macmillan and Co., a volume, in which the question—"How long will the coal which smelts the iron, and produces the steam-power, on which so much of our prosperity depends, last?" will be carefully and amply discussed. The work will probably be ready for publication in about a month, and as the subject is one in which all classes must feel interested, it cannot fail to meet with considerable patronage.

Slate Quarries as an Investment.—The series of articles under this head which have appeared in the Journal for some weeks past, and have attracted considerable public attention, are now being printed in the form of a pamphlet. The entire series has not only been carefully revised and corrected by the author, Mr. John Bower, D.C.L., Barrister-at-Law, Managing Director of the Snowdon Slate Quarries Company, but will also contain many valuable additions. The copy is now in our hands, and, as will be seen by an advertisement in another column, the pamphlet will be ready for sale at our office in a few days, price 1*s.* It will be found to contain not only much valuable information for those who are seeking investments, but will also be read with pleasure by those who take an interest in the gradual opening up of what will now rapidly become one of the staple products of our country.

Preparation of Aluminium.—Mr. Corbelli has found a simpler and more economical process for procuring aluminium than that heretofore used. The metal is prepared from clay, first carefully purified from foreign matter, then dried and treated by an acid to remove iron. About six times its weight of sulphuric acid will answer this purpose. The clay is then allowed to settle, dried again, and mixed with about twice its weight of prussiate of potassa, the quantity of which is to be increased or diminished according to the content of silica in the clay. To this mixture one and a half times the weight of the clay is added of common salt, the mixture placed in a crucible and heated to a white heat. After cooling, the aluminium will be found at the bottom of the crucible

A New Method of Hardening Cast-iron.—A patent has just been taken out in France for a method by which cast-iron may be made as hard as tempered steel. When the object in cast-iron has been filed up and completely finished, it is to be heated to cherry-red, and plunged until it is cold again in a solution containing 70 ozs. troy of sulphuric acid, and 4 ozs. troy of nitric acid, to 2½ gallons of water. The thickness of surface hardened is sufficient for ordinary wear, and the form of the object is not at all altered.

Gas Regulators.—These regulators, patented as a communication from Mons. Giroud, of Paris, by Mr. Henry, patent agent, Fleet-street, consist of moveable valves or hollow plungers, worked by what is called the regulating gas—that is, the gas on its way to the burners from the regulating apparatus, the plunger being suspended from a weighted crank or beam, and being only worked when the supply is in excess of the combustion. There are also concentric chambers, in which the valves work, such chambers acting as water spaces and gas passages. The under part of the float or plunger is conical. The system may be adapted to pressure indicators, and to working clocks or time-keepers.

It was thought there would have been raised 30 tons of tin, whereas 26¼ tons was the actual amount, which, considering the season of the year, was pretty well. It was further mentioned that the Great Pendeen lode was underlying towards the shaft—indeed, taking the 80 and 154 fm. levels there would, probably, be a difference of something like 20 fathoms. The committee of management were re-elected.

At Wheal Trannack meeting, on Jan. 26, the accounts for the three months ending November showed a credit balance of 26*l.* 12s. 11d. A call of 1s. per share was made. Capts. Wm. Bawden and Thos. Cliff reported upon the various points of operation. Since the last meeting they have altered the pitwork, and fixed a plunger-lift at the 40 fm. level, which has entailed an unusually heavy cost.

At South Wheal Seton meeting, on Feb. 2, the accounts for Nov. and Dec. showed a debit balance of 1325*l.* 2s. 10d. A call of 3*l.* per share was made. Capts. Bath and Higgins reported upon the various points of operation. It was resolved that the spare materials not required be advertised for sale, and that Capt. Charles Thomas be requested to inspect the mine, and make his report prior to each account meeting.

At the Clowance Wood Mine meeting, on Monday (Mr. Miles Charles Seton in the chair), the report of the directors was received and adopted. Details in another column.

At North Treskerby Mine meeting, on Tuesday, the accounts for Nov. and Dec. showed a balance of 54*l.* 9s. 4d. Capts. Pryor, Tregoning, and Jenkin reported that they fully believed that the day was not far distant when they would be in a position to increase their returns very considerably. It was resolved that the best thanks of the adventurers be given to the agents for their zeal, energy, and economy in carrying out the various operations of the mine.

At North Grambler meeting, on February 3, a call of 7s. 6d. per share was made.

At Wheal Vlow meeting, on Tuesday, the debit balance for the three months was 61*l.*, after deducting call not paid: a large portion of the amount was paid before the meeting closed. The agents stated "that the 20 has been driven in the last three months 20 fathoms over ground worth 13*l.* per fathom, and that the back of the level was standing entire in the 10, and could be stoped for 45s. per fathom. They had sold over 11⅛ tons of tin in the last eight weeks, and that even with the present low price of tin no call was needed, under the present condition of the mine, and that any considerable advance in the price of tin would leave a balance in favour of adventurers.

WARSAW.—We learn that a projected line from Sandomir to Warsaw, which has long been in abeyance, will be carried out before long, especially in consequence of the great forges and ironworks in the neighbourhood of the route determined on, and the purchase of which is contemplated by a French company.

THE NEW BITUMINOUS SUBSTANCE FROM BRAZIL.—At the Royal Society of Scotland meeting, on Monday, Professor Archer read a communication on a new bituminous substance imported at Liverpool from Brazil, under the name of coal. The Professor stated that the substance—a few specimens of which were presented to the meeting—had been submitted to chemical analysis, and had been found to yield a much larger percentage of oil than any of the bituminous coal which had been examined in Great Britain, not even excepting the Torbanehill mineral. It had little of the appearance of ordinary coal, but seemed to be indurated clay, and yielded a similar series of products to those afforded by other bituminous coal; it was very light, extremely buoyant in water, and was exceedingly inflammable, burning at a very low temperature.

THE LIQUID BITUMEN OF CUBA.—This bitumen is pasty, adheres strongly to the fingers, and has the aspect of coal-tar, becomes fluid upon boiling-water, has a density of 1·33, and is entirely soluble in benzole. Liquified, and projected upon cold water, it floats. Distilled, it gives 67·18 liquids, 12·38 gases, and 20,44 coke. During the distillation, it first liquifies, then swells up, at which moment clear water passes over in small quantity. The mass then sinks down and boils tranquilly, a little more milky and very sulphurous water passing. Oil of an amber colour then distills over. Finally there passes over a thick ropy oil, of an orange-yellow colour (ruby-red by reflected light), which solidifies in the neck of the retort, and in the recipient. This thick portion contains paraffin, and 80 or 85 per cent. of the crude liquid consists of oil resembling oil of schist. The coke is very light and porous, and contains 91·56 of carbon and 8·44 of ashes, which latter are reddish, ferruginous, and similar to those before described. The author says that no bitumen of this species exists in France or Europe, and that it resembles the pasty bitumens of Asia and Canada. In other words, it is a variety of thick petroleum. —*American Gas Light Journal.*

THE AMERICAN PETROLEUM EXPORT TRADE.—The following is the quantity of petroleum exported from the United States, as compared with 1863:—

		1864.		1863.
From New York	Gallons	21,388,499	.....	19,547,604
Boston		1,695,367	.....	2,049,431
Philadelphia		7,760,148	.....	5,595,738
Baltimore		929,971	.....	915,866
Portland		70,762	.....	342,082
Total		31,745,687	.....	28,250,721
Same time in 1862				10,887,701

Petroleum is now sent in considerable quantities to almost every foreign port with which we have commercial relations. Great Britain is the largest consumer of the product, the export from New York thither during last year being 6,275,000 gallons. France is next in importance, her import having been 4,625,000 gallons, a large increase upon the receipts of 1863. The shipments hence to Antwerp have also been large, amounting to 4,149,000 gallons, against 2,692,000 gallons in 1863. Bremen has imported nearly 1,000,000 gallons; Hamburg, 1,186,000 gallons; and Rotterdam, 533,000 gallons. The shipments to Cronstadt indicate a large growth in the demand in Russia, the export thither having increased from 88,000 gallons in 1863 to 400,000 gallons in 1864. The exports to Genoa, Leghorn, Trieste, Lisbon, and Australia, are also considerable.—*United States Railroad and Mining Register.*

THE PLANTS AND ANIMALS OF THE PETROLEUM ROCKS.—I have been at considerable labour to glean from numerous publications, both American and foreign, a complete list of all American vegetables and animals that lived in the latter part of the Devonian age of the world, an age which we may now emphatically call the oil age. I think it to be as perfect as can now be made out. It shows the large amount of material which then existed for the generation of petroleum, and when we remember that it is only the few species of the many that are petrified, and thus preserved—petrification being the exception and decay the general rule—we are surprised at the number of genera and species. The individuals are found by myriads, many feet of strata being filled with them:—

TABLE OF UPPER DEVONIAN FAUNA AND FLORA.

	Plants.	Corals.	Bry-ozoa.	Echino-derms.	Moi-lusca.	Crus-tacea.	Fish.	Reptiles.
Genera	42	16	6	25	106	3	8	1
Species	100	29	10	71	479	31	16	1

Of the plants, 3 genera and 5 species were seaweeds, the rest were land plants.—R. P. STEVENS; 244, Canal-street, New York.—*Scientific American.*

ALGERIA.—The immense mineral resources of Algeria have been frequently referred to in the Journal, yet hitherto comparatively little notice has been taken of the country by Englishmen. It appears, however, that an influential company is now about to be formed for developing one branch of Algerian industry, and no doubt is entertained that when once the attention of capitalists has been directed to it considerable business relations between Algeria and England will spring up. The property to be worked is situated in the province of Constantine, and consists of 7750 acres of land, on which there are 507,000 cork trees, which have been stripped and prepared for the market; 14,000 can be offered for sale this year. The property has been purchased by three gentlemen, who intend to introduce it on the British market; and the concession, for 90 years, is under an imperial decree.

CHEMISTRY OF COAL.—Dr. Frankland, in the course of a series of lectures on the Chemistry of Coal at the Royal Institution, explained the manner in which paraffin oil and paraffin candles are extracted from coal tar, and how the beautiful colours called magenta and mauve are produced from that disagreeable-looking and offensively-odorous substance. The accumulation of the tar in gasworks was formerly a great nuisance, as there was no known available mode of making use of it, but it is now considered so valuable that coal is often distilled at a low heat for the purpose of producing it, the gas being thrown away. From coal tar chemists have separated no fewer than fifty compounds, of which three have been rendered principally useful for dyeing—benzole, phenylic alcohol, and analine. For the production of colours benzole must be converted into analine, which change is effected by heating it first with nitric acid, and then with acetic acid and scraps of iron. The colour mauve is produced by heating analine with bichromate of potass and sulphuric acid; the magenta is obtained by heating analine with arsenic acid; blue and violet are produced by heating magenta with analine. Dr Frankland produced a trayful of glasses, in which were placed small invisible particles of differently prepared substances from coal tar, and on pouring into the different glasses phenylic alcohol they were filled with fluids of various colours, all poured from the same bottle. The following was given as a brief statistical statement of the quantity of dye obtainable from coal:—30 cwts. of coal yield 360 lbs. of tar, which furnish 18 lbs. of naphtha, containing 6 lbs. of benzole; and the latter yield 5 lbs. of analine, which produce 1 lb. of magenta. One pound of magenta will dye 650 lbs. of silk, or 900 lbs. of wool, the latter quantity being the average produce of 160 sheep. Dr. Frankland showed the process of dying cotton, silk, and wool different colours, and he exhibited several other experiments to illustrate the remarkable properties of the substances extracted from what had, until recently, been considered waste products in the manufacture of gas.

NEW COAL THEORIES.—At the Geological Society, Mr. Thos. Goodall, of Craigderran, read a paper entitled "Some Observation on Coal." He stated that he believed coal may yet be found at depths which at present we have no idea of, and that the use of coal would be entirely superseded 200 years after this; and that our descendants, although they may give us credit for doing well in so far as our knowledge extends, will still consider that our mode of producing heat has been very clumsy, and not at all suitable for them. He believed that coal was formed by a process of what might be termed "simplification," and that the carboniferous period formed "the happy medium for the proper development of coal." The strata must have been at first a heterogeneous and undeveloped mass, which was afterwards changed into coal by mechanical, chemical, and other means; and he believed the formation of coal to be in actual operation at the present day. An animated discussion followed.—*Newcastle Daily Chronicle.*

INCREASED VALUE OF IRONWORKS IN AMERICA.—Mr. B. W. Morehead has recently disposed of the Pine Grove Ironworks, situate in Penn township, Pa., to the South Mountain Iron Company, for the very large price of $1,500,000. This is an extensive and valuable estate, well wooded and watered, and contains inexhaustible supplies of the purest iron ore. Within a year this estate was sold by Mr. William M. Watts to Jay, Cooke, and Co., of Philadelphia, for the sum of $350,000, which was then considered a very high price.—*American Railway Times.*

MR. C. POWELL, MINE SHAREDEALER,
78, OLD BROAD STREET, LONDON, E.C.
(Member of the Mining Exchange.)

Mr. POWELL begs to inform his friends and the public that he continues to TRANSACT BUSINESS, as BUYER or SELLER of SHARES in MINES, at close nett prices, either for cash or the fortnightly settlement.

Mr. POWELL continues to recommend the Frontino and Bolivia (South American) Gold Mining Company's shares for investment. Present price 22s. 6d. to 25s. (15s. paid). The immense gold-yielding resources of these mines are being rapidly developed under the superintendence of Capt. W. Goyen (late of the St. John del Rey Company's Mines), whose abilities as a practical gold miner are indisputable. The directors (who hold about one-quarter of the shares) are gentlemen of high standing, and the shares generally are well held.

Mr. POWELL is a BUYER or SELLER of these shares, and is prepared to make a close price to parties having business in them, either for cash or the fortnightly settlement.

Mr. POWELL'S long experience in the Mining Market enables him to advise as to buying or selling in mines as well as any other man, and those who may favour him with orders will be dealt with liberally.

Feb. 10, 1865. Bankers: City Bank, Finch-lane.

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C., has FOR SALE:—

Bronfloyd, £4¾.	East Lovell, £12⅞.	Sithney Metal, £2 8s. 9d.
Birch Tor & Vitifer, 37s 6d	Frank Mills, £6⅛.	Tresavean, £5¼.
Chiverton, £6⅛.	Great Laxey, £18.	Tolvadden, 7s. 6d.
Clifford Amalg., £31⅛.	Great Vor, £33¾.	West Chiverton, £65.
Cook's Kitchen, £10.	Glasgow Caradon, 37s.	West Caradon, £7⅝.
East Grenville, £3 6s. 6d., 3s. call paid.	Hingston, £3 16s. 3d.	Wheal Seton, £200.
	Kelly Bray, 9s.	Wheal Uny, £2½.
East Gunnislake, 10s. 6d.	Lady Bertha, 8s.	Wheal Grenville, £3⅞.
East Russell, £4½.	Mineral Bottom, £5.	Vale of Towy, 3s., call pd.
East Caradon, £13¾.	North Buller, 20s.	Wentworth Consols, £8.
East Basset, £34.	North Robert, 10s.	Wheal Crebor, 39s.
East Vor, £1 16s.	South Tolgus, £24.	

And is a BUYER of:—

East Carn Brea, £6½.	Great So. Tolgus, £2¼.	Hallenbeagle, £3¾.
Hingston, £3⅝.	Wheal Edward, 2s. 6d.	Trelawny, £18.

February 10, 1865. Bankers: Bank of London.

MR. WM. BIRDSEY, MINE AND SHAREBROKER,
No. 6, NEW BROAD STREET, LONDON, E.C.

MESSRS. WARD AND JACKMAN,
2, ADAM'S COURT, OLD BROAD STREET, AND
MINING EXCHANGE, LONDON, E.C.
Bankers: London and Westminster, Lothbury.

JOSEPH J. REYNOLDS, JUN.,
37, OLD BROAD STREET, LONDON, E.C.

Mr. REYNOLDS recommends for immediate purchase shares in Roskearnoweth and East Ellen Mines, being confident that a rise in price equal to cent. per cent. will soon take place. Shares can now be obtained at about £1 per share in each mine.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,
BISHOPSGATE STREET, LONDON, E.C., STOCK AND SHAREDEALER.
(ESTABLISHED ELEVEN YEARS.)

FOR SALE:—100 Wheal Hartley, 11s.; 80 Redmoor, 4s.; 100 Bedol-Aur; 50 North Chiverton, £2½; 50 St. Day, 15s. 9d.; 5 East Carn Brea, £6 6s. 3d.; 15 Hallenbeagle, £3 3s. 8d.; 60 Harriett, 5s.; 120 Prince of Wales, 2s. 6d.; 20 Carn Camborne, 22s. 9d.; 100 Merlyn (offer wanted); 80 Wheal Hope; 25 Tolvadden, 3s. 9d.; 100 Great South Chiverton, 15s.; 2 Trelawny, £19¾; 50 Illogan, 5s.; 40 Drake Walls, 12s. 6d.; 25 Unity, 5s. 9d.; 5 Frank Mills, £6⅜; 5 Great South Tolgus, £2 6s. 3d.; 1 East Basset, £32½; 5 Cwm Erfin, £40½.

WILLIAM WARD,
29, THREADNEEDLE STREET, LONDON, E.C.

SELLER of 100 Great North Laxey shares (for settlement end of July next) at £3 per share.

MR. THOS. THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

WILLIAM SEWARD,
19, THROGMORTON STREET, LONDON, E.C.

MR. HENRY BULLEN, MINE SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

GEORGE RICE, 5, COWPER'S COURT, BIRCHIN LANE, LONDON, E.C. (23 years' experience), Member of the Mining Exchange, has SPECIAL BUSINESS, as BUYER or SELLER, in the following:—

Closing quotations.		Closing quotations.	
Clifford Amalgamated	£31 –31¼	Great Wheal Vor	£33¼–33⅝
Chiverton	5¾– 6	Marke Valley	5 – 5¼
East Russell	4⅜– 4¾	North Treskerby	2 – 2¼
East Carn Brea	6¼– 6⅜	Wheal Crebor	37s.–39s.
East Caradon	13⅜–13⅝	Wheal Grenville	2 12s.– 3
East Wheal Lovell	12¾–13	West Chiverton	63 –65
E. Wh. Grenville (call pd.)	3¼– 3⅜		

BUYER for cash, at best prices, of Chiverton, East Caradon, East Lovell, Great Vor, Marke Valley, and West Chiverton.

GEO. RICE does not publish his opinions, and is, therefore, in a position to give sound and independent advice to all who may require it.

Money advanced on mining shares.
Feb. 10, 1865. Bankers: Bank of London.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.
SHARES in MINES BOUGHT and SOLD on commission, at 1¼ per cent., for immediate cash. Bankers: London and Westminster, Lothbury.

MATTHEW GREENE, STOCK AND SHAREDEALER,
9, GRACECHURCH STREET, LONDON.

Mr. GREENE has FOR SALE the following shares;—

40 E. Rosewarne, £2½.	50 Crebor, 38s.	10 Gt. S. Chiverton, 30s.
10 East Grenville, £3¾.	5 Tincroft, £14¼.	5 Trelawny, £19.
10 New Wh Martha, £1⅛	10 East Lovell, £12⅞.	5 Clifford, £31¼.
5 East Caradon, £13⅝.	20 N. Treskerby, £2½.	10. Gt. S. Tolgus, £2⅜.

And is a BUYER of—Great Laxey, New Clifford, and East Laxey shares for cash.

Mr. GREENE has secured the exclusive services of an able and experienced Mining Captain, for the sole purpose of inspecting the mines in Cornwall and Devon, and whose services will be at the disposal of all parties consulting Mr. GREENE on mining matters.

Gentlemen can have shares registered before payment if buyers, and if sellers Mr. GREENE will pay cash on receipt of transfer.

Bankers: Imperial Bank, Lothbury.

JAMES HUME, 74, OLD BROAD STREET, LONDON, E.C., AND MINING EXCHANGE.

BUYER of East Russell, £4⅜; East Grenville, £3⅛; East Caradon, £13¼; New Wendron, Wheal Uny; Clifford, £31; West Tolgus, £59; South Condurrow, 28s.; North Basset, 20s.; Union, 12s. 6d.; North Shepherds, £2½: East Chiverton, 20s. Business also in all other market shares.

NEW WENDRON.—This mine is becoming a most valuable property, and I recommend holders not to sell at present quotations on any account, as the mine has not its equivalent on the market. The development is economical and speedy. The lode in shaft pays the cost of sinking, and leaves a profit. The produce of the levels gives a profit of 60 per cent. over the cost of driving or stoping.—*Vide* report. Those interested should increase their holding, as a demand must sooner or later occur for these shares.

Bankers: London Joint-Stock Bank.

MR. H. WADDINGTON, SHAREDEALER, 77, OLD BROAD STREET, LONDON, E.C.

Mining and other shares dealt in at the closest prices.

Clifford Amalgamated, Great North Downs, East Lovell, and Wheal Uny are strongly recommended; the latter mine will sell 80 tons of tin for the quarter, and promises to be one of the greatest mines in Cornwall. The shares from being 9 to 10 have fallen to 2½, and are now the cheapest in the market, and safe for a rise on investment. Speculators with money may now make cent. per cent. profit within a short time.

THOMAS HAMILTON (late of Truro), STOCK AND SHAREDEALER, No. 1, CROWN COURT, THREADNEEDLE STREET, LONDON (Member of the Mining Exchange).

Bankers: The Alliance Bank.

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent. Bankers: London and Westminster Bank.

MR. J. P. ENDEAN, STOCK AND SHAREBROKER,
1, CROWN COURT, OLD BROAD STREET LONDON, E.C.

Having had 25 years' experience in the mining districts of Devon and Cornwall, and three in the London market, with daily information of important changes from qualified agents, also the most authentic reports relating to other investments, he is in a position to afford the earliest information to his clients, and to direct capitalists whether to buy or sell in mines, railways, or other securities.

Investors should apply to him for reliable information relative to the Chiverton Mines, also the Camborne and Illogan districts.

A carefully selected list of sound progressive and dividend shares (certain to give a large percentage immediately) forwarded on receipt of 5s. in stamps.

Orders and telegrams receive immediate attention.

HARRIS AND CO., STOCK AND SHAREBROKERS,
AND FINANCIAL AGENTS,
15, GEORGE STREET, MANSION HOUSE, LONDON, E.C.

MR. WALTER TREGELLAS, 3, CROWN COURT,
THREADNEEDLE STREET, LONDON, E.C., has BUSINESS in the FOLLOWING MINES:—Santa Barbara, Frontino and Bolivia Gold, Great Wheal Vor, North Shepherds, East Caradon, and North Roskear.

W. TREGELLAS strongly recommends the above mines for immediate purchase, as these shares will pay good interest for money at present quotations.

W. TREGELLAS has great pleasure to announce the improvement in Santa Barbara shares, which ought to have been long ago. The mine has greatly increased its returns for the last few months, and it still continues to increase rapidly. The report by the last mail is highly satisfactory, and we have also received by the same 6820 ozts., or 790 ozs. 12 dwts. 8 grs. of amalgamated gold; we should have had 7000 ozts. had the refuse sand been treated. I have always recommended these shares for investment, and do now strongly advise all my friends and clients to buy at the present price.

W. TREGELLAS is a BUYER or SELLER of Santa Barbara shares at the close market price.

SILVER-LEAD ORE.

Mines.	Tons.	Price per ton.	Purchasers.
Jan. 21—Havan	51¼	£13 12 0	Sims, Willyams, & Co

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Feb. 3	—Minera	100	£13 15 6	Mining Co. of Ireland.
	— ditto	100	13 15 0	Sims, Willyams, & Co.
	— ditto	95	13 18 0	ditto
	— ditto	100	13 13 6	A. Eyton.
	— ditto	28	13 13 6	ditto
	— ditto	29	13 14 6	Walker, Parker, & Co.
	— ditto	13	11 6 0	Sims, Willyams, & Co.
Feb. 7	—Macsyaafn	30	13 13 6	Walker, Parker, & Co.
	— ditto	30	13 13 6	Panther Co.
	— ditto	60	13 15 6	ditto
Feb. 9	—Talargoch	111½	14 14 6	Walker, Parker, & Co.
	— ditto	77	15 1 6	A. Eyton.
	—Deep Level	12	13 0 0	ditto
	—Brynford Hall	5	12 1 6	Walker, Parker, & Co.
	—Rhosesmor	40	12 15 6	A. Eyton.
	—Parry's	21	13 11 0	Newton, Keates, & Co.
	—Bryn Gwiog	40	14 8 6	Walker, Parker, & Co.
	—North Henblas	7¼	12 7 6	ditto
	— ditto	7½	12 7 6	Newton, Keates, & Co.
	—Pennant	11	13 6 6	Walker, Parker, & Co.
	—Llangynog United	29	12 18 6	ditto
	—Wheal Exmouth	17	11 12 6	Falmouth Co.

BLENDE.

Date.		Tons.	Price per ton.	Purchasers.
Feb. 3	—Minera	87	£3 0 6	H. Southern.
	— ditto	25	3 0 0	W. Kenrick.
	— ditto	12	2 17 0	H. Southern.
	— ditto	26	3 7 6	ditto
Feb. 8	—Great Laxey	200	2 11 0	Vivian & Sons.

BLACK TIN.

Date.	Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Jan. 26	—Phœnix	16 12 2 9	—	£ 799 0 2	—
Feb. 3	—St. Day United	21 18 1 1	—	1084 3 9	—
	—Gt. Wheal Busy	15 4 1 27	—	755 5 9	—
Feb. 4	—Wheal Uny	11 4 2 27	—	593 4 1	—

COPPER ORES.

Sampled January 18, and sold at Swansea February 7.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Knockmahon	127	12⅝	£10 10 0	Cuba Ore	127	14	£11 2 6
ditto	71	11¼	9 7 0	ditto	81	20½	16 10 6
ditto	23	12⅝	10 6 0	Precipitate	12	57¼	45 16 0
ditto	63	10⅝	8 15 0	ditto	9	56½	45 8 0
Genoa	86	12⅝	10 3 6	Var	33	14⅜	11 14 6
ditto	68	11⅝	9 15 0	ditto	15	24½	20 4 0
ditto	74	8¼	6 13 6	Casali	28	12⅝	10 0 0
ditto	10	17½	14 8 0	Vic. Emanuel	41	6¼	4 16 0
ditto	11	7½	5 18 0	ditto	11	12⅝	10 11 6
ditto	10	5⅞	4 10 0	Berehaven	101	9¼	7 13 6
Cobre	110	12¾	10 7 0	ditto	60	12½	10 11 0
ditto	109	12⅞	10 6 6	Regulus	2	51	42 11 0
ditto	12	14½	10 18 6				

TOTAL PRODUCE.

Knockmahon	284	£2785	10 0	Casali	28	£ 280	0 0
Genoa	259	2285	18 0	Victor Emanuel	52	313	2 6
Cobre	231	2395	0 6	Berehaven	161	1408	3 6
Cuba Ore	229	3709	12 0	Regulus	2	85	2 0
Var	48	689	18 6				

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Copper Miners	191 5–8	£2061 14 11
Freeman and Co.	109	1125 8 6
Grenfell and Sons	60½	432 11 9
Sims, Willyams, and Co.	196 5–8	2440 6 5
Vivian and Sons	293	3194 2 0
Williams, Foster, and Co.	255	2921 5 0
Mason and Elkington	110¼	1020 11 9
Sweetland, Tuttle, and Co.	9⅓	93 6 8
Penclawdd Copper Co.	68	663 0 0
Total	1294	£13,952 7 0

NO SALE Feb. 21.

TOTAL AND AVERAGES.

	21 cwts.	Produce.	Price.	Standard.
British	447	11½	£ 9 11 6	£102 15 6
Foreign	847	18¾	11 8 6	99 1 0
Whole sale	1294	13	£10 16 0	£100 3 0

TOTAL AND AVERAGES OF LAST SALE.

	21 cwts.	Produce.	Price.	Standard.
British	214	8⅝	£ 7 6 6	£107 11 0
Foreign	1576	18⅝	15 16 6	97 9 0
Whole sale	1790	17⅜	£14 17 0	£ 98 1 6

COPPER ORES.

Sampled Jan. 25, and sold at Tabb's Hotel, Redruth, Feb. 9.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Prosper United	102	£4 19 6	Rosewarne Consols	28	£13 5 0
ditto	93	3 19 6	Rosewarne United	67	4 11 6
ditto	91	2 2 6	ditto	42	9 15 6
ditto	89	1 12 6	Par Consols	65	5 15 6
Carn Brea	70	2 10 0	ditto	42	2 18 0
ditto	68	6 3 0	New Treleigh	41	0 10 0
ditto	60	4 0 0	ditto	32	1 4 6
ditto	51	6 4 0	ditto	30	2 6 0
ditto	35	7 14 6	Botallack	49	8 3 0
ditto	34	3 7 6	ditto	16	8 10 6
ditto	23	1 12 6	ditto	9	8 8 0
West Basset	69	7 1 6	Copper Hill	33	2 5 0
ditto	62	3 19 0	ditto	28	11 14 6
ditto	59	3 7 6	Boscaswell	39	8 11 0
ditto	42	5 6 0	ditto	17	8 3 0
ditto	33	12 12 6	Charlotte United	34	5 1 0
ditto	29	2 19 0	ditto	19	0 19 0
ditto	28	4 2 6	South Dolcoath	25	11 10 6
East Carn Brea	74	3 11 0	ditto	18	7 17 0
ditto	60	5 15 0	West Fowey Consols	42	8 5 0
ditto	50	5 16 0	Wheal Curtis	23	6 1 0
ditto	47	6 5 0	ditto	18	2 10 6
Levant	85	5 10 6	Mellanear	14	3 6 0
ditto	71	5 0 6	ditto	18	1 11 6
ditto	35	0 19 6	South Carn Brea	31	3 1 6
ditto	2	30 3 0	ditto	1	35 16 0
Great South Tolgus	44	2 17 6	Wheal Agar	7	3 3 6
ditto	43	10 1 6	Tehidy	13	6 5 0
ditto	42	4 1 0	Guriyn	12	5 5 0
Rosewarne Consols	56	7 13 0	West Grylls	4	9 10 0
ditto	37	10 10 0			

TOTAL PRODUCE.

Prosper United	375	£1215	2 6	Copper Hill	61	£ 402	11 0
Carn Brea	341	1571	18 0	Boscaswell	56	472	0 0
West Basset	322	1772	9 6	Charlotte United	53	189	15 0
East Carn Brea	231	1191	9 0	South Dolcoath	43	459	8 6
Levant	193	920	16 6	West Fowey Con.	42	346	10 0
Great South Tolgus	129	729	16 6	Wheal Curtis	41	184	12 0
Rosewarne Consols	121	1187	18 0	Mellanear Mine	25	63	10 6
Rosewarne United	109	717	1 6	South Carn Brea	24	106	10 6
Par Consols	107	497	3 6	Wheal Agar	20	103	9 6
New Treleigh	103	128	14 0	Guriyn	12	63	0 0
Botallack	74	611	7 0	West Grylls	4	38	0 0

Average Standard ..... £118 15 0 | Average Produce 6¾
Average Price per ton £5 4 0
Quantity of Ore ..... 2486 tons | Quantity of Fine Copper, 166 tons 12 cwts.
Amount of Money £12,943 3 0

LAST SALE.—Average Standard ..... £120 11 0.—Average Produce 6⅞
Standard of corresponding sale last month, £128 10 0.—Produce, 6.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	457½	£2489 16 3
Freeman and Co.	139½	843 16 9
Grenfell and Sons	234½	1833 8 6
Sims, Willyams, and Co.	272	1161 7 6
Williams, Foster, and Co.	332½	2044 1 4
Mason and Elkington	321	1537 5 8
Bankart and Sons	19⅝	66 7 6
Copper Miners' Company	269	1157 6 4
Charles Lambert	236 5–8	1131 8 8
Sweetland, Tuttie, and Co.	123	305 6 6
Penclawdd Copper Co.	86½	372 18 0
Total	2486	£12,943 3 0

NO SALE on Thursday next, February 16.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and parcels.—Devon Great Consols 2030—Marke Valley 469—East Caradon 438—Devon and Cornwall 410—Okel Tor 311—Brookwood 204—Badford United 188—Wheal Crebor 124—Yarner 118—New Cornish 106—Wheal Friendship 102—Kelly Bray 90—Gunnislake (Clitters) 87—North Robert 72—Sortridge Consols 31—Hawkmoor 21.—Total, 4801 tons.

Petitions for winding-up the General Rolling Stock Company (Limited), and also the Rolling Stock Company of Ireland (Limited), are to be heard before Vice-Chancellor Wood, on the 18th inst.

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.,
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

"SINK YOUR SHAFT."—A capital story is told of Frank Mills. That mine, years ago, was very productive, and paid dividends. All at once it became poor, and level after level failed to be productive of anything but vexation to the shareholders, who got thereat disheartened and alarmed. Shares became quite valueless in the market, and many were given away, though they had formerly cost a great price. Amidst this general dismay, one old shareholder said "Sink your shaft." This, to the purser and agent—looking at the temperament of the shareholders generally—was easier said than done. Still, as the caged starling of Sterne had but one cry—"I can't get out!" so this old shareholder had but one cry—"Sink your shaft!"—"Sink your shaft!" and he dinned it into the ears of the purser so that he could not rest; and all at once he and the agent, upon their own responsibility alone, undertook to sink the shaft, without consulting the shareholders, who might have objected to the outlay. Well, they sunk through more than 20 fathoms of unproductive or unpaying ground, till they got to the 100 fm. level; there they found ore again: and whereas at the upper levels the ore was poor for silver, and worth 11*l.* to 12*l.* per ton, that from the 100 and 115 is worth 18*l.* to 20*l.* per ton. The mine, in market value has risen from "nothing" to 30,000*l.*, and is paying 1500*l.* in dividends quarterly, with a prospect of continuance; and all this success is owing to the old man's cry of "Sink your shaft." Now, in this story, which is essentially true, there is great encouragement for many, and we will try out of it to resuscitate our own "Hope." Wheal Hope, years ago, made large returns of lead, which were smelted on the spot. The present company have raised and sold from the old workings several thousand pounds worth of silver-lead, but the 75 and 85. from which so much was expected, have proved disappointments, though in the 85 there is a fine, well-defined lode, in a good channel of ground. The shares are about as valueless in the market, and the holders as disheartened, as were those of Frank Mills; and it would be useless, we fear, for *us* to say "Sink your shaft," so we say this—let the captain of Frank Mills inspect Wheal Hope, and if, after seeing the lode in the 85, he says "Sink your shaft," let every other operation be suspended, and let the entire management of the mine be in the hands of the purser of Frank Mills. Let the shares of those who *will not* pay their calls be forfeited. Let those who do not choose to go on relinquish their shares, and let the shares so forfeited and relinquished be sold at 1*l.* per share (there would be plenty of buyers then); the money so obtained to form the nucleus of a capital sufficient to "sink the shaft" to the 100 fathom level, or 15 fathoms deeper. If this be done, we believe the success will be as great as it was in Frank Mills. And now, Mr. Wescomb, we say, "SINK OUR SHAFT."

WHEAL POLLARD.—In reply to several correspondents, we state that we have the same good opinion of the ultimate success of this mine, if properly prosecuted, as we ever had. Thus far, we have supported our opinion by losing nearly 2000*l.* by the mine; and if a new company is ever formed with capital in hand to prove it we are ready to join again, but we got tired of paying up our calls regularly on 600 shares, and advancing money as treasurers, when other shareholders in the present company were two or three calls in arrear. We were, in fact, carrying on the mine for the benefit of others; and, unfortunately, this is too much the case in other mines. Some shareholders never will pay calls when mines are poor. This has been the case in Wheal Unity, a mine carried on by ourselves almost during its poverty; but now that it is likely to turn out well, we dare say arrears will be paid up promptly enough.

"A FEW WORDS ON SLATE, SLATE QUARRIES, AND SLATE QUARRY COMPANIES."—The pamphlet just issued, through Effingham Wilson, of the Royal Exchange, by "A Man of Experience," contains half-a-dozen as readable chapters upon the subject of Slate as need be desired. The geological views of the writer are undoubtedly novel—his theory being that the characteristic qualities and deposit of slate seem to point to a liquifaction of the mass, apparently by the action of fire. This he considers proved by the resonance and close vitreous texture of slate, which point to matter run together like glass, and slowly cooled like a mass of lava. He considers the character of the North Wales slate deposits to be between that of rock to be quarried and of mineral ores to be won by mining. He considers that slate combines the properties of stone, metal, and glass. In general structure and appearance it is stone; in elasticity, toughness, and closeness of texture it resembles metal, whilst it rings and shivers from a violent blow like glass. From these notes the general theoretical views of the writer will be readily seen; but when he comes to the practical portion of the subject—the quarrying and manufacture of slate, the management of slate quarries, and the slate trade and slate quarry companies—he show a large acquaintance with the necessities and objections in connection with the business, and offers many valuable suggestions for adoption; he displays the "Man of Experience" so far as his practical knowledge is concerned, but most persons would prefer to leave his theories untouched.

GEOLOGICAL MAGAZINE.—The original articles in the February number of this magazine include contributions from some of the ablest observers of the day, and cannot fail to be read with interest. The Notes on the Shape and Structure of some parts of the Alps, with reference to Denudation, by Mr. John Ruskin, F.G.S., is illustrated with four woodcuts; and the paper On a Fossil Whale from Ely, by Mr. H. Seeley, F.G.S., has a well executed lithograph, in which the cervical vertebræ of palæocetus Sedgwickii, which is also referred to in Dr. Gray's Observations on the genus palæocetus, which forms a continuation of the same paper. The other original article is a note on Xiphoteuthis elongated by Prof. Phillips. The Notices of Foreign Memoirs comprise Messrs. Martin and Garrigou Mineral Springs of Ax and Luchon studied geologically, and a notice of Leonhard and Geinitz's Neues Jahrbuch. Ramsay's Physical Geology and Geography of Great Britain is reviewed, as also is Whitaker on the Geology of London and neighbouring country, and Huxley on the Structure of Belemnites. There are reports of the proceedings of the Geological Societies of London, Ireland, Edinburgh, Glasgow, Liverpool, Manchester, and Dudley; of the Bath Natural History and Antiquarian Field Club; and of the Oswestry and Welshpool Naturalists Field Club. In addition to this there is ample geological correspondence, so that the magazine, as a whole, may be regarded as conveying as concise a view of the progress of geological science during the month as need be desired.

THAMES TUNNEL COMPANY.—Receipts for the week ending Feb. 4, 78*l.* 9*s.* 1*d.*; number of passengers, 18,349.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending February 5 was 10,263*l.* 16*s.* 11*d.*

Notices to Correspondents.

THE COST-BOOK SYSTEM.—Can the affairs of a mine, managed in London and worked upon the Cost-book System in Cornwall, be wound-up in Chancery, and settled in London—that is, without having recourse to the Court of Stannaries?—S.

COLLIERY WORKINGS.—Can any correspondent tell me the drawing depth of the following pits:—Monkwearmouth, Shire Oaks, Dukinfield, and the Rose Bridg, and Ince Hall Pit? An answer in your Notices to Correspondents will oblige.—E. S.

HEAVY SPAR.—I believe that "Mercury" might obtain some sulphate of baryta, though, perhaps, not in very large quantities, from M. Laurent's mine, between Plancher-les-Mines and Miellin. For further information "Mercury" may apply to me or to M. Victor Laurent, à Plancher-les-Mines, par Champagney, Haute Saône, France.—B. O. W.: 42, *Albany-street, N.W.*

THE GIANT TRILOBITE.—Having seen in last week's Journal an interesting account of a paper read by Mr. Plant, at the Geological Society of Manchester, "On the Discovery of the Giant Trilobite Paradoxides," at Tyddyngwladis, near Dolgelly, North Wales, I beg to inform your readers that I have a fine collection of specimens (Paradoxides), and will be glad to show them to any gentleman interested in the collection of fossils.—W. HOSKIN: *Cwmheisian Mine, Llanelltyd, Dolgelly.*

THE CHLORINE PROCESS OF TREATING GOLD—"G. D." (Dolgelly).—In a correspondence at present going on in the United States, it is remarked that so far as concerns Prof. Crace-Calvert's process of intermixing the ore at once with the necessary quantity of peroxide of manganese, salt, and sulphuric acid, Mr. Adolphus Ott maintains that the process can only be used with auriferous quartz, and not with pyrites, and that under all circumstances it is so nearly impracticable that it is better to force a stream of gas through the already crushed ore. We do not attempt to decide which opinion is to be relied upon.

MINERAL INDICATIONS.—Among the Notices to Correspondents in last week's Journal was the following question:—"Can any of your practical correspondents inform me through the Journal whether sulphur ore in a large body—say, 12 ft. thick—generally covers a body of silver-lead ore or of copper ore? Which is most likely?" Allow me to reply by saying *neither*: it is indicative of itself, and is evidently a sulphur ore lode.—CHARLES BAWDEN: *St. Day, Feb.* 8.

WHEAL EMMA.—Some time since considerable attention was called to this mine as to its merits and management; and as there has been no reports from the mine for so long a time, I think it would be most satisfactory if the manager would favour us through the Journal with a report (say) once a fortnight, that shareholders at a distance may know their real position.—F. P.

TREWEATHA MINE.—How many years longer are shareholders to be satisfied with weekly reports of "water being pumped out, of valuable lodes being cut, again of the water getting in and stopping further working," and for which alone a three-monthly drain, by way of calls, is made on their pockets? Assuredly, amongst the holders of (formerly 4096) shares there must be some who, considering the heavy amounts they have paid, and are paying, and with a "new engine" costing some 5000*l.* or 6000*l.* staring them in the face, "without which there is no thought of sinking below the 50," [vide *Mining Journal* of January 14], will think the time has come for sending some reliable person to thoroughly inspect this valuable property and report thereon, in order that they may judge for themselves whether or not they are justified in continuing under the present system of management, or whether a change may not be desirable. —ONE WHO DOES.

WHEAL UNITY.—Nearly 15*l.* per share, or 90,000*l.*, has been called up in this mine, a heavy and expensive drag on the shareholders. It must, however, be a gratification to find that their perseverance under great difficulties is likely to be rewarded, and that Wheal Unity may yet be a great mine. For months past matters have been improving. The agent thinks that they have come into a course of ore, which improves as they go down. In the Journal of Jan. 21 the lode in the 70 west yielded 5 cwts. of ore per fm.; 70 east looking promising. On the 28th the 70 east was worth 4 cwts. per fm., and the 70 west 6 to 7 cwts. per fm. On Feb. 4 matters had still further improved, the 70 west being worth 10 cwts. per fm., and the 70 east yielding good saving work. They are evidently on the top of a course of ore, widening in depth. In the 60 fm. level they had ore for 5 fms. in length, and in the 70 they have driven over 10 fms., and lode still improving. Sinking below the 70 will be pushed on with all speed, and if the improvement lasts to another level a vast quantity of ore ground will be laid open. Under these circumstances holders should not part with their shares. A discovery like this, in such a district, is of great importance. The young mine, Rosewarne Consols, made large returns from the same lode at about this depth. The shares are being eagerly sought after, and a rise of 300 to 400 per cent. is not at all unlikely. Of course, attempts will be made to keep the shares down, but every foot sunk will render such attempts more and more difficult.—SHAREHOLDER.

BAGTOR.—In the Notices to Correspondents in last week's Journal is a letter from "A Shareholder," in reference to Bagtor Mine. He states that some time since they were told that 10 tons of tin would be sold by Christmas from this mine, but at the last moment's "crisis" the agents discovered there were only 2¼ tons for sale. He then says an answer to the query would oblige, by stating the size and value of the lode. How giving the size and value of the lode can be an answer I cannot possibly see. Persons, if they want information, should really write intelligibly, if not grammatically. However, for "A Shareholder's" information, I beg to inform him that up to Christmas last 10 tons 7 cwts. of tin have been sold, and that if he had taken the trouble to look into the sales of tin ore he would have seen that the last 5 tons were sold in two sales, only six weeks apart. I should observe that the sale of the last batch was delayed some ten days by the frost, so that although raised previous to Christmas it was not absolutely sold and paid for till some ten days later. I state this to avoid any possible misapprehension.—A DIRECTOR.

PNEUMATIC LIFT FOR MINES.—Some few months since I read a notice in the Journal of an invention patented by Mr. Alison, for employing compressed air to force up mine cages from the bottom to the top of the shaft, but as in my opinion it is a mechanical impossibility economically to apply it, I should like Mr. Alison, or any other person interested in the invention, to explain how they hope to obtain success. Of course, Mr. Alison will admit that the pressure of the air beneath the cage must be sufficient to counterbalance the weight of the cage to be raised and its contents. Let us suppose, then, that the bottom surface of the cage is 6 ft. by 4 ft., and that the cage packs into the shaft as tight as a piston fits a steam-engine cylinder (it must be as tight as this, or the escape of the compressed air will prevent the cage rising at all), and try what quantity of air must be pumped in to raise the cage and load (say) 250 yards, the weight of the whole being 1 ton, which is a very low estimate. Even if we take it that 5 lbs. (above atmospheric) pressure upon the square inch will suffice, which it certainly never would, except in a tube with a carefully bored interior, we should require so many 100,000 cubic feet to be forced in, that the cost of forcing it would be far greater than at present incurred in drawing by the ordinary means of steam-engine direct and rope. If Mr. Alison can answer these questions satisfactorily to the public, it might be advantageous to him to state whether there would not be increased danger with the pneumatic arrangement, as in the event of accident the shaft would be at once choked, and all communication with the workings would be cut off.—H. C.

CLIMBING LADDERS FROM DEEP MINES.—The letter of "A Collier" shall appear in next week's Journal.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, FEBRUARY 11, 1865.

Notwithstanding Mr. HOLLAND's letter, which appeared in the Journal of January 21, in which he attributes Miners' Disease more especially to climbing, we find the Report of the Commissioners signed, without any reservation, by Mr. P. H. HOLLAND, giving as the first, and, therefore, we may presume the most important resolution, the following:—"That there is a great excess of sickness and mortality amongst metalliferous miners, which is *mainly attributable* to the imperfect ventilation of the mines." We then have sundry remarks, the first paragraph of which we quote:—

"However diverse the opinions of medical men may be as to the causes of the disease called 'miners' asthma,' or 'miners' consumption,' there is a remarkable concurrence among all the writers on this subject, in this, that the health of the miner is greatly influenced by the quality of the air in which he works. The more extended enquiry instituted by us (Mr. HOLLAND included) under the Royal Commission gives strength, if not certainty, to this conclusion."

After this we do not see any necessity for remarks on Mr. HOLLAND's letters, beyond the expression of our belief that the power of the Commission is infinitely weakened by the expression, in this way, of individual opinion.

We look at the names of the gentlemen who constitute this Commission with a desire to learn the amount of experience they may have had in practical mining. With the exception of Mr. NICHOLAS KENDALL and Mr. RICHARD DAVEY, there is no no one of them that has not learnt his lesson during the progress of this enquiry. Mr. KENDALL is as well acquainted with mining operations as any gentleman is likely to be who has a fancy for underground explorations. Mr. DAVEY was so long in the countinghouses of the Gwennap and Redruth mines, that he should have much knowledge of mining explorations. We infer, however, from a close examination of the questions proposed, that they are imperfectly acquainted with mining engineering. They have studied the mine accounts, the cost of materials, the value of a piece of ground, and the modes of paying the men; but they have been perfectly satisfied to leave the working of the mines in the hands of the agents, in whom they have placed—and justly so—a large degree of confidence. These gentlemen have gone underground, they have never experienced any ill effects from vitiated air; therefore, they have not troubled themselves with the problem of improving it, until now. Be this as it may, it is quite evident that the remarks on the first resolution have been the result of a considerable diversity of opinion: they bear marks of compromise from the beginning to the end. The few paragraphs on "the main object to be kept in view in ventilating a mine," are striking examples of the false dignity of imperfect knowledge, assuming to instruct those who have had long practical experience. They are poor platitudes, which must be smiled at by every intelligent mine agent. Only take as an example the following:—"The most simple method of ventilation is by natural agencies, directed and supplemented by engineering skill." We do not suppose this axiom will be controverted, but we did suppose that all those for whom this report is intended were sufficiently advanced in this particular science to be spared the infliction of this display of rudimentary knowledge. It is scarcely worthy of the expenditure of our space or time to show that the Commissioners, so far from being up to the knowledge of the day in the question of ventilation, are very far behind it. It was all very proper that they should make themselves acquainted with the methods employed for ventilating our collieries, but it is truly a matter of surprise, that any intelligent set of men should have conceived the possibility of applying, with any chances of success, the principles of ventilating a coal mine, to a metalliferous one.

A coal mine is usually, and for our purpose may be regarded as always being, worked on a horizontal plane. At one extremity of the workings are two shafts, or, formerly, often one shaft divided. From these shafts the workings extend far away, and it becomes necessary to employ some powerful force to move the vast body of air which exists in the workings, whichever system may be adopted. Consequently, one of the shafts, or one of the divisions, is converted into a chimney, through which a strong current of air is impelled, by either furnace or fan, whilst the other is the channel through which the fresh air descends. This coursing the air through all the workings demands the utmost attention, and the most careful arrangement of doors or valves. Now, the main result, is that through one shaft—the *up-cast*—the air is drawn out of the mine, and through the other shaft—the *down-cast*—the air is sent into the mine. Here are two vertical channels, without any lateral openings or airways, forming very perfect air-tight chimneys, having a length, it may be, of several hundred yards.

Now, in the section which accompanies the Commissioner's report we find that the vertical shafts of a metal mine, so far from resembling the shafts of a colliery, have upwards of twenty lateral openings on either side—that is, we have that which may be regarded as the proposed chimney, with *above forty openings in its sides.* We should like to see any really practical plan by which all these openings could be so secured as to ensure anything like a continuous current of air, up or down, by any artificial means.

The colliery has *one* or *two* shafts. In the section of Dolcoath Mine, printed with the Commissioners' report, we count no less than *twenty-three* shafts. Now, to effect that which the Commissioners desire, it would be necessary to stop up twenty-one of those shafts, and to virtually close thirty-eight of the forty lateral openings into, what would then be, the up and down cast shafts of the mine. The introduction of any system of furnace ventilation into a deep Cornish mine would be the introduction of a new element of danger. So far from any relief being possible by such an application, even were it practicable, the condition of such mines as Dolcoath, Clifford Amalgamated, Carn Brea, &c., would be rendered ten times worse than that which now exists, in any one of the worst of their close ends.

Mr. HOLLAND—and we only select that gentleman because he may be regarded as a fair example of those constituting the Commission—speaks of himself as an "experienced enquirer." This is the constant danger of hastily acquired knowledge. We believe Mr. HOLLAND's experience of mining commenced with the Lundhill explosion, where, as an officer of the Burial Board, he was on duty. The "experience" which could venture to recommend "furnace ventilation" in any mine which has numerous shafts, and where the workings are on twenty or more vertical planes, every one of which must be constantly opening into the main shaft or shafts, is not worth much.

The Report would have exerted a far more extended influence than it is now likely to do if the Commissioners had contented themselves with showing that the means adopted are not so perfect as they might be rendered, and with urging attention to this important point. With numerous shafts, if the winzes are properly placed, the levels driven of a proper size, and kept clear of accumulations of ore or waste, the air of our deep mines may be rendered sufficiently pure to secure a healthful action of all the vital powers of the miner; in all parts but the close ends, and for these especial appliances have been adopted, although not always used with sufficient readiness and care. Imperfect ventilation is certainly one of the causes which lead to Miners' Disease. While a man is in robust health he may climb the ladders without danger; but lower the vital powers of the system, by cutting off a little of the oxygen from the air, by adding carbonic acid or organic matter to the air, and then the toil of climbing becomes a tremendous labour, which accelerates the evil.

Let strong efforts be made to accelerate the introduction of improvements into our mines. Every holder of a single share in a mine is bound by every Christian duty to learn that no proper precautions are omitted by which the safety and health of the miner may be secured.

There is much carelessness, it cannot be denied, in many of our metal mines; and if the Report of the Commissioners, and the dread of an Inspection Act, lead to an improvement, great good will have resulted from the enquiry.

TRADE WITH SPAIN.—Although we fear that the figures for last year will present a falling off—Spain having latterly passed into a very unsatisfactory condition—it is interesting to observe that many branches of our trade with that country have been reviving of late. Thus the exports of coal will be seen to have steadily increased in the five years ending 1863.—

Year.	Quantity.	Value.
1859 ..... Tons	426,481	£216,496
1860	445,529	222,535
1861	484,833	247,508
1862	506,592	249,577
1863	557,412	273,138

The exports of copper, wrought and unwrought, to Spain amounted in 1859 to 1079 cwts.; 1860, 2089 cwts.; 1861, 1154 cwts.; 1862, 1073 cwts.; and in 1863, 1771 cwts. The value of these exports was in 1859, 6495*l.*; 1860, 12,745*l.*; 1861, 6101*l.*; 1862, 5389*l.*; and in 1863, 8701*l.* The exports of wrought and unwrought iron very largely increased in the five years ending 1863—thus:

Year.	Quantity.	Value.
1859 ..... Tons	50,588	£386,545
1860	76,916	616,017
1861	82,321	618,917
1862	96,469	775,576
1863	102,045	799,805

We sent steam-engines to Spain to the value of 91,040*l.* in 1859, 161,108*l.* in 1860, 231,739*l.* in 1861, 246,562*l.* in 1862, and 229,522*l.* in 1863. Other machinery was also exported from the United Kingdom to Spain to the value of 178,581*l.* in 1859, 146,979*l.* in 1860, 170,991*l.* in 1861, 133,362*l.* in 1862, and 160,603*l.* in 1863. We may possibly note in a future paragraph other phases of our trade with Spain.

EXPLORING IN SOUTH AMERICA.—During the voyage of exploration undertaken by Mr. Pissis, in 1864, in Aranconia and a portion of the territory at the east of the Andes, he was enabled to make some very interesting geological observations, the result of which he has communicated to Mr. Elie de Beaumont, and will shortly be laid be the Academy of Sciences. According to Mr. Pissis, a vast trachytic plateau (of volcanic origin), of an altitude varying from 15,000 to 16,000 metres (4921 to 5249 feet) occupies in this spot the place of the chain of the Andes. On the western edge of this plateau rest several higher mountains, in the midst of which are the volcanic cones of Antuco, Callaqui, Kaima, and Villarica, all in full activity. This plateau rests at the west on the Devonian formations, or on Tertiary conglomerates, and terminates on the east at the base of a chain formed of Red Sandstone and Lias, whose direction is that of the system of the Andes. This chain, which is situated at more than 20 leagues to the east of the separation of the waters, is the last that is met with. Beyond extend the pampas, of which the soil is an argillaceous tufa, proceeding from the disintegration of trachytic rocks, covered here and there by vast dunes of sand. It is a central desert, extending from Rio-Negro towards Patagonia. An oblong mass of granite, extending south of the Rio-Bio, forms the axis of a maritime chain known by the name of the Cordillera de Nahuelcuta, and in this portion its direction differs only a few minutes from that previously determined. This rection is represented with accuracy by the 26th bissector of the table of circles, arrived at in the pentagonal group of Mr. Elie de Beaumont. Though Mr. Pissis could not discover any characteristic fossils in the sandstones or the schists which are in contact with the granite, the comparison of these rocks with those of the Devonian formations of Bolivia, their situation, not only under the Red Sandstone, but under a carboniferous formation lower still, led him to suppose that they belonged to the same epoch, and consequently to the most ancient period of soulevement of which Chili presents indications. The volcano of Antuco, which had been in eruption the preceding year, was not projecting any solid matter during Mr. Pissis's visit, but there was an abundance of thick smoke, and great quantities of hydrochloric acid were evolved, so that it was only by taking

advantage of occasional gusts of wind that he could approach to examine the crater. The analyses of the specimens brought, and the report, will shortly be laid before the Academy of Sciences.

THE VIEILLE MONTAGNE ZINC MINES, FOUNDRIES, &c.

This powerful company, which alone annually produces one-fourth of the zinc used in the industrial world, has the principal seat of its operations in Belgium. Seven of the most important zinc works are in that country—at Flône, Valentin-Coq, Liége, Tilff, Welkenraed, Angleur (the head quarters of the administration and direction of the company), and Moresnet. It is at the latter place that calamine is found in abundance, in open pits, friable, and easily worked. A fall of water, well managed, serves at once to wash the ore and separate it into coarse and fine fragments. At Moresnet the ore is exclusively calamine, or carbonate of zinc, the other mines of the company give blende, or the sulphuret. The calamine when washed is placed in large kilns, with alternate layers of ore and small coal, and heated so as to drive off a portion of the carbonic acid gas and all the water, but not to such a degree as would volatilise the zinc. It is then taken to the reducing-furnaces, where the pure metal is separated; the most ancient method having been to enclose the calamine, packed in layers with wood charcoal, in crucibles hermetically sealed at top, but with an aperture at bottom, through which the pure metal escaped into a mould of coal-dust. The process adopted at Angleur is exactly the reverse of this, and was invented in 1780 by a chemist of Liége, the Abbe Dony, who, by small experiments, conducted in a laboratory, endeavoured to disengage, by distillation, the metal from the calamine in the crucible. As soon as the zinc came into contact with the air the flowers of zinc were produced, and to prevent this expansion the Abbe Dony stopped up the mouth of the retort with a small flower-pot. He lost a great deal of the oxide of zinc, but the metal was deposited at the inferior concavity of the pot, and this was the foundation of the present system, by which 100,000 tons of zinc in different states are annually worked. The furnaces, large quadrangular piles, are ranged in line in the midst of a vast hall, opening outwards by large arched bays, through which tramways communicate with the group of lines in the yards. Each furnace consists of an inner fireplace, and a chamber in which the crucibles are placed. These chambers, of various sizes, contain from 40 to 80 crucibles. The furnace is at first heated to a dull red heat, which it takes about three days to effect, it is then filled with crucibles, also heated to a red heat, whose openings are covered with stoppers, not hermetically closed; the fire is then kept up for twelve hours, after which the crucibles are ready to receive the ore. Reduced by grinding to a fine powder, the ore is carried in a small wagon to the man charging the furnace, while another wagon brings very small coal (anthracite); these he mixes together into a paste with water, with which he gradually fills the crucible, by the aid of a long-handled spoon, in small quantities of 30 to 40 grammes (about 1¼ oz.) at a time until it is full; this charging takes about four days. When it is completed, a contrivance is applied, which replaces the flower-pot of the Abbe Dony; this is a sort of truncated cone, wide enough at its base to fit into the mouth of the crucible, and contracted enough at its summit to allow only an aperture of 2½ in. diameter for the escape of the gases. The heat is then raised, the water mixed up with the ore and coal evaporates, the carbon and oxygen unite, and at each tube appears a jet of flame, which passes from red to blue, and to bluish-green. At this moment flakes of metallic oxide begin to appear, and to avoid the considerable loss which would follow immediately the cone is capped with an envelope of sheet-iron, which is furnished with only a very small aperture for the gas to escape. By degrees the calamine is completely decomposed, and the carbonic acid and carbonic oxide gases are formed, and escape from the crucible, carrying with them drops of the metal. These vapours arising into the tube are condensed drop by drop, until a bath of liquid zinc, covered with a thin pellicle of oxide, is formed.

The calamine of Moresnet, like the blendes of Sweden, gives about 50 per cent. of pure zinc, of which a very slight portion is formed in the shape of metallic oxide in the lengths of the tubes; the Spanish blendes yield often 50 per cent. The zinc when obtained is sold in a rough state to the trade in the shape of flat ingots, or pigs, of various forms, dimensions, and degrees of purity. The quantity of zinc furnished by the works of the Vieille Montagne Company is about 25,000 tons, of which 3000 are rolled at Oberhausen, in Prussia; 10,000 at Angleur and Tilff, in Belgium; and the remainder at Braysur l'Epte, near La Roche-Guyon (Seine-et-Oise).

FOREIGN MINING AND METALLURGY.

Since the commencement of the year the position of the Belgian market has remained somewhat undecided. During the past season a rather marked difference between the prices of English and Belgian iron contributed to extend the external relations of the Belgian iron trade, while the good reputation enjoyed by Belgian iron was not without its influence. As English iron has displayed a downward tendency of late, it is obvious that Belgian metallurgists must strain every nerve to maintain in the eyes of strangers the advantages which they previously enjoyed—that is, good quality and good conditions as to prices. The demand for Belgian iron is not very active for the time; at the same time animation begins to return to the Belgian markets, as is usually the case after the expiration of the first few weeks of the year. At Charleroi, refined pig for hard iron has made 3*l.* 4s. to 3*l.* 8s.; ditto, for soft iron, 2*l.* 12s. to 2*l.* 16s.; speckled pig for hard iron, 3*l.* 10s. to 3*l.* 14s.; and pig for fine-grained iron, 3*l.* 16s. to 3*l.* 18s. per ton. Steely pig has made 3*l.* 12s. to 3*l.* 14s. per ton. Casting pig, No. 1, has made 4*l.* 4s.; ditto, No. 2, 4*l.* 3s.; ditto, No. 3, 4*l.*; ditto, No. 4, 3*l.* 18s.; ditto, No. 5, 3*l.* 16s. per ton. Rolled irons, No. 1 (mixed), have made 6*l.* 12s.; rolled irons No. 2 (slightly hard), 7*l.* 4s.; rolled irons No. 3 (hard), 7*l.* 16s.; rolled irons No. 4, 8*l.* 8s. per ton. Rails have made 6*l.* 16s. per ton. Hammered irons, first class, made 10*l.* 12s. to 10*l.* 16s.; ditto, second class, 11*l.* 16s. to 12*l.*; ditto, third class, 13*l.* to 13*l.* 4s. per ton. Hammered irons, charcoal-made, have been quoted—first class at 14*l.* to 14*l.* 8s.; second class, 15*l.* 4s. to 15*l.* 12s.; and third class, 16*l.* to 16*l.* 8s. per ton. Double T-irons have made 7*l.*; ditto, second class, 8*l.* 4s.; ditto, third class, 10*l.* 4s.; ditto, fourth class, 11*l.* 8s. per ton. Plates of commerce, 2 to 2½ millimetres thick, have made 9*l.* 8s.; ditto, 1 to 1¼ millimetres thick, 10*l.* 4s.; ditto, finer, 11*l.*; and extra for locomotives, 13*l.* 8s. per ton. At Liége, refined pig, hard iron, has made 3*l.* 4s.; refined pig No. 2, 3*l.*; speckled pig, 3*l.* 8s.; grey refined pig, 3*l.* 10s. to 3*l.* 14s.; casting pig No. 1, 4*l.* 2s.; ditto, No. 2, 4*l.*; ditto, No. 3, 3*l.* 18s.; ditto, No. 4, 3*l.* 16s.; ditto, No. 5, 3*l.* 14s. per ton. Rolled irons No. 1, 7*l.* 4s.; ditto, No. 2, 7*l.* 16s.; ditto, No. 3, 8*l.* 8s. Plates No. 3 have realised 10*l.*; ditto, No. 2, 9*l.* 4s.: ditto of commerce, coke-made, 12*l.* to 12*l.* 8s.; ditto, charcoal-made, 16*l.* to 16*l.* 8s. per ton. The price of coal has been advancing in Belgium of late. The resolution entertained on the part of coalowners not to sell, except at high rates, is justified by the situation of affairs; thus the supplies on hand are short, orders continue to be abundant, and the rise is accepted without complaint by commerce. Coal is expected, in fact, to advance in proportion to the production up to at least the end of March. This excellent position may, probably, be maintained by coalowners if they seek to avoid competition amongst themselves. It is to this competition that coalowners must attribute, in a great measure, the calamitous years through which they have just passed: will not the hard lessons of experience bear some fruit? In moments of uncertainty, when there has been hesitation among coalowners as to the course to be pursued with regard to prices, the reaction which might follow any advance was the phantom which habitually presented itself. It was possible for them to render this reaction for a long time remote, if they ceased competing among themselves; but, under any circumstances, if this reaction must one day have arisen, would it not have been better that it should have taken place on a price of 16s. than on one of 14s. 6d.? Another pretext which has been raised against an advance was the fear of seeing high prices provoke an excess of production, but in the present state of affairs this danger is not likely to arise. Labour is deficient, while some categories of workmen make default altogether. At the commencement of 1864 there was a considerable stock on hand, but at the beginning of 1865 all the coal which had accumulated had been sold, and the current extraction is sold also. What is the inference to be deduced from this result? Why, that admitting the same extraction and the same sale in 1865 as in 1864, coal will be deficient by the whole quantity which was on hand in warehouses or at pits' mouths on Jan. 1, 1864. There is, then, apparently a margin for a certain augmentation in the extraction, if the scarcity of labour did not prevent it, and it might be made without involving the unfortunate consequences which certain individuals dread in connection with an advance in quotations. Among the dividends recently announced we find one of 5*l.* per share by the Couchant du Flénu Colliery Company, in partial repayment of the share capital; and another of 16s. per share by the Bellevue Colliery Company, against remission of coupons Nos. 10 and 11.

The arrival of numerous orders for charcoal-made pig is noted at St. Dizier, and several affairs have been concluded at a sensible augmentation on previous quotations. Thus, a contract is mentioned for 700 tons, at 4*l.* 10s. per ton in warehouse, at the works, which would carry the price to 4*l.* 12s. 10d. at the St. Dizier station, and to 4*l.* 12s. on the *parc* of the supposed purchaser. A lot of disposeable has been treated besides at 4*l.* 12s. per ton at the St. Dizier station, and another lot of 150 tons has obtained 4*l.* 12s. 2d. In consequence of these affairs, the quotation for charcoal-made pig is firm at 4*l.* 12s. per ton. There are purchasers at this price for disposeable goods, but no goods are on the *parcs*. A lot of 100 tons of mixed pig, to be produced with a proportion of 50 to 60 per cent. of coke, has been purchased at the rate of 4*l.* per ton on the St. Dizier market. The amelioration noted in the demand for pig has not made itself felt in the sale of iron, which remains heavy, while prices are without firmness. Rolled irons have made 8*l.* 16s., and beaten irons 10*l.* 4s. to 10*l.* 8s. per ton. The quotations current at Lyons, and those of the Moselle, regulate prices in the Franche-Comté and the Burgundy district. Lyons merchants now quote coke-made irons at 8*l.* 12s. to 8*l.* 16s. per ton for first-class, but for some time past a certain slackening has been noted in the sale, which may contribute to bring about lower quotations, if the improvement which has appeared in the financial situation does not shortly lead to a revival in affairs. The sale of special irons for building purposes progresses only slowly, and does not enable prices to be so well determined in the Franche-Comté as at Paris; at the same time quotations may be indicated thus:—For Lyons, 8*l.* 16s.; and for Marseilles, 9*l.* 7s. 3d. per ton. The substitution of iron for timber in buildings is far from being an accomplished fact in the provinces, by reason of the low price of the woods of the Adriatic on the littoral of the south, and of those of Burgundy and the Jura in the upper zones. Strong puddled plates are worth from 11*l.* 4s. to 11*l.* 12s. per ton at Lyons, and from 11*l.* 12s. to 12*l.* per ton at Marseilles. The price of charcoal-made irons ranges from 17*l.* 4s. to 17*l.* 12s. per ton for hammered, and from 17*l.* 12s. to 18*l.* 8s. per ton for cylinders. As regards the fine pig of the Franche-Comté, it is held at a marked rise on the quotation of the last Besançon fair, which was about 6*l.* 4s. per ton. The quarterly meeting of the forgemasters of this group is to take place this month, and we shall soon know whether the last rates established for pig are to be modified or confirmed. According to information furnished to the committee of French forgemasters, the number of furnaces in operation in the various metallurgical groups of France during the year which has just elapsed was as follows:—150 Charcoal-worked, 130 coke-worked, 850 puddling, and 136 refining; making a total of 1266 furnaces of all kinds. Upon the total production of pig and iron effected in France in 1864 we have not at present any precise information. The deliberations of the French Council of State on the proposed decree for introducing modifications into the *octroi* tariffs on pig and iron entering Paris have not yet been closed, and the necessary decree cannot, consequently, be rendered on the subject before Jan. 1, 1866. The *octroi* administration is accustomed, in order to facilitate its accounts, not to apply the modifications introduced into its tariffs only from the commencement of an exercise, and it is generally believed that any modifications in the present *régime* will, if they take place at all, be adjourned to Feb. 1, 1866. If the advance, which has taken place in Belgian coal and coke should prove permanent, it must inevitably be attended with an advance in the price of irons in the Nord, and the principal works of that district have shown great reserve in laying in supplies. It appears that the Ronchamp and Sarrebruck basins are also advancing the price of coal. It is stated positively that the French Government has just conceded to M. Talabot—who represents, we presume, the General Company for Promoting Commerce and Industry in France—mines of ironstone in the province of Constantine, Algeria. It is hoped that the arrivals of minerals from French Africa will become considerable, and that they will give a stimulus to industry in the South of France. The advance, which for several years has been noted in the traffic of the Bessèges and Alais Railway—a short coal line of 20¾ miles—seems to have been checked for the present. Thus the amount acquired in the three weeks ending Dec. 21 this year was 4483*l.*, as compared with 4597*l.* in the corresponding period of 1864, showing a decrease of 114*l.*

Little animation has prevailed in copper on the markets of Berlin, Cologne, and Hamburg. Few orders are in course of execution, and prices may almost be considered as nominal; in the case of good orders, holders would consent to do business on lower terms. At Paris, affairs in copper have been inactive, and the article presents a sensible fall; English, in plates, has made 90*l.*; United States (Lake Superior), 102*l.*; Chilian, 82*l.*; and Corocoro mineral, 86*l.* per ton. Towards the close of last week Chilian gave rise at Havre to some speculative affairs, and 82*l.* per ton had been paid for two lots of 165 tons and 25 tons; the sale is also mentioned of 15 tons of Minesota, at 102*l.* 16s. Since these placements have been effected, the market has been quieter. The other copper markets of the Continent have remained without movement. Amsterdam advices state that the situation of the tin market during the month which has just elapsed does not furnish much matter for interesting comment. A better tendency appeared in affairs at the commencement of the month, but no essential amelioration took place, and the market maintains the quiet in which it has been languishing for several months past. One rather notable affair has been concluded at 55¼ fls., but it appears that this was a forced realisation, as beyond this transaction purchases can only be effected at 56½ fls. and 56 fls. This last price has been allowed in an affair of 800 ingots, concluded on the receipt of the last striking news from America. The intentions of the Government are not at present known with regard to the eventual change of the system followed hitherto in connection with public sales, although it is very probable that this question will be soon decided. The uncertainty which still prevails on this point explains, perhaps, in some degree, the attitude of holders. In the course of the past month 790 tons of Billiton changed hands at rather less than 56 fls. The situation of the stock of Banca tin was as follows, Jan. 31:—

	1864.	1863.	1862.
Stock on schedule, Dec. 31 .....Ingots	66,907	75,538	69,740
	1865.	1864.	1863.
Deliveries in January	4,230	5,165	9,335
Stock, Jan. 31.....	62,677	70,373	60,405

The stock for the approaching sale, January 31, was 108,598 ingots, as compared with 75,338 ingots Jan. 31, 1864; and 75,950 ingots, Jan. 31, 1863. Later advices note an improvement in the position of the article, and 60 fls. would have been paid for Banca, while 61 fls. was asked. The direction of the Society of Commerce has intimated that it will only hold one public sale this year, and that in the month of June. The Paris market for tin has been inactive; Banca has made 98*f.*; Detroit, 93*f.*; and English, 94*f.* At Berlin, Cologne, and Stettin the article has remained without enquiry. The Hamburg market has been quiet but prices have maintained themselves rather better at that centre, the stocks on hand being limited. Lead remains in the same position at Paris; rough French has been feebly held at 21*l.*, and Spanish at 22*l.* 12s. per ton. The Rotterdam market has exhibited little enquiry for the article, and at Hamburg there has also been an absence of demand. At Cologne refined soft lead has been rather enquired after, and maintains its price well. Irrespective of the requirements of consumption, the demand has been insignificant at Berlin; the Stettin market has also been quiet. The zinc markets have displayed a slightly hardening tendency. The Paris market has been quiet, at 20*l.* to 20*l.* 10s. At Breslau, business has a better tone; at the same time, affairs are not very active.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

FEB. 9.—We have again to complain of a general dulness in the Iron Trade. Many parts of the district are affected by strikes caused by the recent reduction in the wages of the men. It is very probable that they will not be of long continuance, the determination of the masters being such as to out-struggle the efforts of the men. The demand for manufactured iron is exceedingly dull, and merchants purchase only for immediate requirements. The rates for first-class brands are tolerably firm, but needy makers are compelled to force sales at prices under the regular quarter-day quotations. For heavy castings, armour-plates, and rails there is a tolerably good enquiry; indeed, there are some very large orders in the market this week for rails, both for home and the Continent. The stove-grate manufacturers at Rotherham are very actively employed, considering the period of the year for building operations. Pig-iron is dull, and rates very unsteady.

All descriptions of coal continue in good demand throughout these counties, and the rates, as a consequence, are remarkably firm. There are many complaints of the want of rolling stock on the part of the Great Northern Railway Company, which has greatly interfered with the punctual supply for the London coal merchants. A representation has been made to the company, and resulted in an interview with Mr. Seymour Clarke, who promised that the inconvenience should be remedied. The export coal trade, *via* Grimsby and Hull, is vastly increasing, and will, no doubt, continue to extend, as the Manchester, Sheffield, and Lincolnshire Railway Company are giving every facility for the encouragement of the traffic to those ports. The coal traffic is also being developed in many parts of Derbyshire, more especially on the Erewash Valley line, now that there there is an exit for the minerals per railway. The Staveley Coal and Iron Company have also bought a new colliery at Aston, which is to be called the North Staveley Colliery, and under the management of the officers of the Staveley Coal and Iron Company.

An experiment as to the applicability of the magnesium light to the photographing of the interior of mines was made a few days since by Mr. Brothers, of Manchester, in the Blue John Mine, near Castleton; although highly interesting it, was not altogether successful, but it left no doubt that with a little more experience every obstacle will be surmounted. The partial failure was attributed to the higher temperature underground having caused a little condensation on the apparatus.

A case of great importance to miners was heard before the county magistrates at Chesterfield on Thursday last. Messrs. Barnes, of the Birchill Colliery, summoned three of their workmen for a violation of the rules of the colliery, in getting on a chair at the bottom of the pit, contrary to the orders of the hanger-on. Mr. Cutts, solicitor and town clerk, appeared for the prisoners, contending that they had not done any unlawful act; and if they had done so it had been through ignorance, as there had been no previous warning given. It appeared to have been a custom with the Messrs. Barnes to make the loaders wait at the bottom of the pit until the underviewer had certified that they had done their work, when the hanger-on would send up. It was contended, on behalf of the men, that if this regulation were allowed to prevail the men would have to wait hours at the pit bottom. The offence for which they were summoned was that they would not wait till the hanger-on was ready to send them up, but that they forcibly took possession of the chair. The magistrates ruled that they had only to consider the question—"Did the men disobey the orders of the hanger-on?" If they did they were liable. They refused to impose a fine, but committed the prisoners for 14 days to hard labour. The case has excited considerable interest.

Mr. John Brown, of the Atlas Works, Sheffield, who has won many high honours as a manufacturer of armour-plates, has given the magnificent sum of 5000*l.* towards the fund now being raised for building churches in Sheffield. It is understood that this sum will defray the entire cost of building one of the churches, which it is intended to erect in the neighbourhood of the works, and which will, no doubt, be extensively frequented by the numerous workmen.

The secretary of the Mill Dam Company has sent to the shareholders a statement of the accounts of the mine for the year ending Dec. 31. It is the fifth statement, made out at irregular times, by the directors, and is, unfortunately, not of an encouraging nature. The following statement, extracted from the accounts of this and former years, shows the total expenditure since the company was formed, and the money received for ore sold. The local share lists describe the mine as consisting of 3000 shares, upon which 3*l.* per share had, previous to the last call, been paid; but there is a discrepancy between the share list and general statement for 1863, the latter of which accounts for 2*l.* per share only, upon 1000 of the shares. In November last another call, of 10s. per share, was made, the payment of the second instalment becoming due on the 1st inst.; the money received, therefore, appears to be—

3000 shares, at 3*l.* 10s. per share	£10,500	0	0
Money received on the sales of ore up to Dec. 31, all of which has been expended	14,592	0	0
Total expenditure.....	£25,092	0	0

No dividend has ever been made. For some weeks past the mine is reported to have become too poor to pay the expenses of working it. The last statement (for 1864) is not very clear; but the following account of receipts and expenses for six months preceding the end of the year will show what foundation there is for the report:—

June 20 to Dec. 31—Paid for labour and merchants' bills	£2464	4	8
June 28 to Dec. 28—Received for ore	2146	4	9
Loss on six months.....	£ 317	19	11

But this sum probably does not include the whole of the loss, for at the foot of the statement is a list of liabilities for bills due to various tradesmen, apparently for coals, powder, candles, timber, and other articles, and balance to the bank, amounting to 1070*l.*, some part of which has, no doubt, been incurred within the last six months of the year, besides an item due to the attorneys, making the whole liabilities against the mine amount to 1520*l.* 16s. 7d. The assets are stated to be 1439*l.* 1s. 3d.; but 851*l.* 15s. consists of arrears and the second instalment of the call last made.

The most remarkable circumstance attending the management of this company is that the mine should have been divided into such a great number of shares, and so excessive a sum expended in the trial of a piece of mineral ground so short and inconsiderable; the whole possessions of the company only extend over 500 or 600 yards of ground in length. Other companies have always secured a reasonable quantity of mineral ground before they incurred much expense; but the directors will, perhaps, be prepared with explanations on all matters relating to the mine at the annual meeting on the 14th inst.

There is nothing doing in the local stock and share markets in lead mining stock, but bank and several local firms which have recently been formed into limited liability concerns are enquired after.

SHEFFIELD.—We are unable to report any decided tendency to activity in the state of trade at Sheffield. Some houses are in receipt of good orders for steel and saws from Germany; but, on the whole, these and kindred branches are in much the same languid state as described last week. The engineers' tool-makers are, on the whole, fairly employed; but in the edge-tool cutlery, and several other branches, the orders are smaller than was anticipated, and manufacturers who have done a good deal for stock since Christmas, are limiting work as much as practicable, until they are able to estimate more accurately the prospects of the spring trade. Some of the workmen in the engineers' tool trade are agitating for a reduction of the hours of labour, but the announcement has not assumed formidable dimensions, and it is the only dispute between masters and workmen at present pending in Sheffield. At Rotherham trade is, on the whole, moderately active. Some attention has been attracted to the manner in which justice is administered at Rotherham, by the committal to prison of a hammer-driver, named Eli Swift, employed at the Phœnix Ironworks, for neglect of work. His fellow-workmen have petitioned the Home Secretary for his immediate release, stating that he was dragged from his bed at midnight, taken before a magistrate early next morning, at the magistrate's own house, and, in absence of friends or witnesses for the defence, sentenced to imprisonment for one month. A remand, for the purpose of producing witnesses, and preparing a defence, being applied for, and refused. It is, unfortunately, too much the practice at Rotherham, as in more rural districts, not only to drag men from their beds at midnight for such offences as neglect of work, but to parade them to and fro through the streets next day, often handcuffed, in search of a magistrate, who will adjudicate upon these cases in a *quasi*-private manner at his own residence. At Sheffield a much more lenient practice is pursued; men accused of such offences being warned or summoned to attend before the magistrates in open court, when there is no special reason for a contrary course, and being apprehended only when they refuse or neglect to obey the summons. No reply has yet been received from Sir George Grey with respect to the case of Swift. At Sheffield the need has long been felt of a School of Practical Science and Metallurgy for the instruction of the artizan as well as the manufacturer. Some time ago such an institution was opened in connection with the Collegiate School, but it has failed from the inconvenient distance of that school from the town for night classes. A more feasible project is now under consideration, is a project for attaching a School of Practical Science and Metallurgy to our excellent School of Art. The promised visit of the Social Science Association to Sheffield is stirring up some of the public bodies to the necessity of providing better accommodation for large meetings. The Cutlers' Company have for some time had under consideration an excellent project for the extension of their handsome hall, and the proprietors of the Music Hall have now decided to enlarge and improve their premises. The Coal Trade is brisk. The cold weather has increased the demand for house coal during the past fortnight, and there is a very full demand for furnace coal. The demand for coke is moderately good, but not brisk, owing to the quietness of the steel trade.

REPORT FROM NORTHUMBERLAND AND DURHAM.

FEB. 9.—The Coal and Iron Trades here continue, on the whole, favourable; the coal trade especially progresses rapidly, the demand for all kinds of fuel being most excellent. As might be expected, this demand has already had the effect of increasing the production, and new sinkings, borings, and discoveries of coal are being made. A seam has lately been sunk to at the Ouston Colliery, which is known as Russell's Busty. This seam is below the well-known Hutton or Low Main seam, and only a few years ago the winning of seams below this was only thought of on the western outcrop of Durham; but a short time ago a seam was won at the Pelton Colliery, and, it proving good, the winning of a similar seam at Ouston has soon followed, and there can be little doubt that this will be followed by other explorations shortly. Respecting the quality of the coal that is found in those deep winnings, it is generally rich, and highly bituminous; and, although there are some disadvantages connected with the raising of coal from great depths, there are other advantages connected with working coal in depth, the most important being that, as a rule, very little water is met with, while near the surface this plague of the miner is but too plentiful. The late lessees of the Chilton Colliery (the Hartlepool Railway Company) were obliged to abandon those works on account of the unproductive nature of the mines, so far as had been explored; but lately the lessor has had a boring made on the western portion of the estate, which has been executed by the well-known borer, Mr. Stott, and the Five Quarter seam has been reached in a good state, so that it is pretty certain the colliery will not only be resuscitated, but greatly extended. The coal and estates are the property of Lord Eldon.

We noticed lately that the Wylam Colliery and Ironworks were offered for sale or to let, and made some remarks on the coal, and the position of this very old and well-known current going concern. It is now understood that a much respected firm in the North, the Messrs. Frazer, are about to lease the whole of the works, and from their well-known energy there can be little doubt but they will be carried on most successfully.

At the meeting of the Northern Institute, on Saturday, there was a very large attendance of members, and, as we foretold last week, the proceedings were of a most interesting character. The discussion on Mr. Hedley's paper, "On the Nova Scotia Iron Mines," was postponed, on account of the absence of that gentleman. The discussion of Mr. Morison's paper, "On the Belgian Mining Fund," was opened, but not much entered into. Mr. Morison stated it to be his opinion that many of the details of the Belgian system might be with great advantage engrafted upon the Miners' Relief Fund of this district, and there can be little doubt that this would be a most judicious course. The paper of Mr. House, "On the Boundary between the Millstone Grit and Mountain Limestone," was not discussed, owing to the absence of Mr. Sopwith. A paper was read by Mr. Cochrane, "On the Ventilating Fan at Elswick Colliery, near Newcastle." From the description given in his paper, the fan appears to be very effective, and one of the best if not really superior to any ventilator of that description yet erected in this country. It was constructed in Belgium, and intended to produce a current of 50,000 cubic feet of air per minute. It has already produced upwards of 40,000 cubic feet per minute, and will no doubt, when all the arrangements connected with it are fully carried out, produce the quantity it was intended to circulate. With respect to its merits, as compared with the furnace, there will, no doubt, be various opinions, and the question will be fully discussed at future meetings. The cost of the machine was stated to be 450*l.*, and the expense of erection to be added. The paper read by Mr. Embleton, "On the Coal-cutting Machine now at work at the Keppon Colliery, near Leeds," was the great attraction of the meeting. The paper enters most fully into the mechanical arrangements of this curious and very ingenious machine. It is entirely self-acting, the pressure of water being got up by an engine worked at the bottom of the shaft, which is also used in forcing the water from the mine to the surface. The pressure is raised up to 300 lbs. per square inch, and transmitted a distance of 600 yards, through a 2½-in. pipe, to the coal-cutting machine. When this is worked at full speed a pressure of about 100 lbs. per square inch is lost, owing to the friction of the water in passing through the pipes. The machine itself consists of a 4-in. ram, and attached to the piston-rod is a bar on which is fixed to the cutters, three in number, which cut the coal to the depth of 3 ft., or more if required. It cuts the coal exactly in a similar way to a machine planing wood, or rather it cuts the holing out by means of these cutters, which are, in fact, strong gouges. The depth of the holing, as we have stated, is 3 ft., and upwards if required, and height 3 in.; so that the saving in round coal is great, the loss from slack being only 6 per cent.; the loss from the same cause, where manual labour is employed, is 26 per cent. We must refer those who wish to enter into the subject of this successful machine to the whole paper, which will shortly be published in the "Transactions of the Mining Institute," and where all particulars will be found respecting cost of machine, cost of working, &c., a full abstract of which I will forward for an early Journal.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

FEB. 9.—There is a distinct, though by no means extensive, improvement in the demand for iron, and there is scarcely any manufacturer in the district who has not rather more business. If reduced prices were accepted the makers would soon have enough to do, but, with wages at their present rates, this would be suicidal. More pigs had been sold. Hematites of superior quality are now offered at 3*l.* 7s. 6d. The North Staffordshire Strike continues. The millmen are willing to go in, and some of the under-hands are working the puddling-furnaces; but, as a body, the puddlers are out, and it is said that the most oppressive tyranny is practised to prevent any men from going to work unless the former wages are paid. At Wolverhapton, yesterday, the committee of the South Staffordshire Iron Trade, in response to an application from the ironmasters of North Staffordshire, decided to summon a meeting of the ironmasters from all parts of the kingdom, to be held at Birmingham, on Thursday next, to consider the expediency of a general closing of all the ironworks until the North Staffordshire men have returned to work. Should the necessity for such a step appear, everyone must deeply regret it, for it will be a renewal of the social war by which masters and men are despoiled, the latter suffering most, as they can least bear such a strain. In this letter the necessary consequence of the men combining on a national scale was clearly pointed out, and unless the North Staffordshire men yield they will be too terribly verified. If this internecine war continues, a man will be paying 7s. 6d. in supporting strikes to get 1*l.* in wages.

In connection with this puddlers' strike, a matter of considerable interest to the trade intimately associates itself. Allusion has before been made to a patent rotary puddling-machine, the invention of Mr. Bernard P. Walker, of Wolverhampton. Some time ago the patentee sold the patent to the Dowlais Iron Company, who put up one of these rotary

puddling-furnaces. After a thorough trial, it is found to answer perfectly, and the best proof of this is that the company are putting down a forge in connection with it. One of these furnaces turns out as much iron as four ordinary puddling-furnaces without the aid of the puddler. Mr. Menelaus, the respected manager of the Dowlais Iron Company, was to have read a paper on the subject at the last meeting of the Association of Mechanical Engineers at Birmingham, but, to the great chagrin of many present for the purpose of hearing this paper, the time was taken up by a long discussion on the claims of the inch and the metre as standards under a decimal system, and Mr. Menelaus' most important paper could not be read. Should all that is said of this machine prove true, it will effect a revolution in the iron manufacture.

At the Longton Police Court, on Wednesday, William Lovatt, an engineman at Messrs. Glovers' Colliery, was charged with the breach of the 29th special rule, which provides that no engine-tenter, without the express permission of any chartermaster, underlooker, or manager of a colliery, shall allow any other person to work or handle the engine in his charge. It was clearly shown that the defendant had allowed his brother to work the engine for several periods on the day in question, and it was also clear that from the latter acting unskilfully the crank was broken, and much damage done. Mr. Davis, the stipendiary magistrate, thinking the offence too serious for a fine, sent the defendant to prison for a month, with hard labour.

To-day an accident of a most terrible nature has taken place at the Earl of Dudley's Salt Works (No. 10 pit) Colliery, by which six men lost their lives. The pit is worked by Samuel Davis. The men went down to work as usual yesterday morning, Davis going down with them. At about half-past six, as he was passing a portion of the pit called the Open Side Works, accompanied by Wm. Smith, his doggy, he saw six men at work. He spoke to them, passing a cheerful remark, and asked if all was well. He and the doggy then passed on, but in a few seconds he heard what he describes as a bump and a rattle. He immediately turned back, and discovered that a quantity of coal had fallen and buried the six men to whom he had an instant before spoken. He called out, but the only answer he heard was one groan. He then procured help for the purpose of extricating the men, being careful not to alarm the neighbourhood so as to cause unnecessary excitement. Notwithstanding all the exertions made, so great was the quantity of coal which had fallen on the men, that it was half-past six at night before the bodies were recovered. They were then all dead, and in so shockingly mangled a condition that they could only be identified by portions of their clothes. The names of the deceased are—John Smith, Netherton, single; Emanuel Roberts, Darby Hand, married; Edward Johnson, Dudley Wood, married; William Mansfield, Kate's Hill, married; John Ruff, Bowling Green, Withymore; and Richard Pikey, Garrett's Lane, Rowley. The pit in which the accident occurred was considered remarkably safe. It has been worked for upwards of eight years in the thick coal and ironstone, and it is stated this is the first accident which has ever taken place.

REPORT FROM MONMOUTH AND SOUTH WALES.

FEB. 9.—The Iron Trade of this district is in much the same state as last week, and there is no material alteration to record in either the demand or quotations. Two or three large orders for rails are in the hands of some of the makers of the district, and, upon the whole, the trade is in a moderately satisfactory state. The men have gone in at several of the works where they had made a partial stand against the reduction in wages, but there are a few yet out, and unless this few yield it is evident that there are serious times in store for the iron trade. A great meeting of the trade is about to be called, in order to take the opposition of the men in the different iron-producing districts of the kingdom into consideration; and, judging from indications, there is every probability that the disastrous step of closing all the works will be determined upon, provided the men continue to refuse to submit to the reduction. This course will be nothing more or less than the issue of a long-contending struggle between capital and labour, and it must be admitted that the men have, on the present occasion, pushed their claims to extremes, taking into consideration the decline which has taken place in the price of iron. It is still to be hoped that the men will see the necessity and wisdom of giving way, for if the works are stopped they themselves will assuredly be the greatest sufferers. The steam coal trade is brisk, and the collieries are well employed. There is a good demand as well for house qualities. The tin-plate trade remains quiet, with but little business doing.

The death is announced of Mr. Clark Irving, the chairman of the Pontnewynydd Iron Company, and proprietor of the Brynna Collieries. Mr. Irving had been in Australia for a great number of years, where he had amassed a large amount of money. Some changes are expected in the Pontnewynydd Company, consequent upon his death. The Hubberston (Milford) Dock Company announce that arrangements are in progress with the view of constructing the works without delay. The Milford Railway Company and the Great Western support the undertaking, and the former have expressed their intention of subscribing 10,000*l*. A large quantity of coal will be shipped at Milford, once the docks are completed. The Swansea Vale and Neath and Brecon Junction Railway have entered into a contract with Mr. J. Dickson for the construction of the works, which would be commenced without delay. The Neath and Brecon Company were applying for powers to acquire a lease of the Swansea Canal, which, if obtained, would be conducive to the material advantage of this company. The directors, in consequence of the agreement with Mr. Gwyn and others, had promoted a bill for making a branch to Abercraf. They also intended to apply for further powers to effect a junction with the Swansea and Neath Railway, with a view to acquire a direct access into the town and docks of Swansea.

The Neath and Brecon Railway branch to the Banwen and Maesmarchog Collieries is in course of construction, and the works on the main line are being vigorously proceeded with. The Swansea Vale district teems with minerals, and by acquiring the Swansea Canal the company would obtain access to many of the works already established.

It appears that the Welsh iron-plate makers are determined that no Staffordshire house shall surpass them in the rolling of thin plates, and that they will have little difficulty in carrying out their resolution will be readily understood when the extremely fine quality of the Welsh iron generally is taken into consideration. It has already been noticed in the Journal that a sheet had been rolled at the Hope Works, Tipton, only the 2100th of an inch in thickness. Several plates considerably thinner have since been rolled at the Marshfield Black Plate Works, and Mr. David Davies, the indefatigable manager, entertains, no doubt that if these sheets be surpassed he too will be able to roll still thinner. Amongst the new sampled are—a perfect sheet, 44 square inches (8 × 5½), weighing 23½ grains, and 1-2853d of an inch thick; another, 54 square inches (9 × 6), weighing 38 grains, and 1-2360th of an inch thick; and a third, 48 square inches (8 × 6), weighing 25 grs., and 1-2950th of an inch thick. Surely this is carrying the experiment quite as far as is necessary for any useful purposes.

A number of Welsh miners from Merthyr Tydvil, and other localities in North and South Wales, sailed from Liverpool to New York, in the Inman steamer, *City of Boston*. Having very good reasons for believing that the simple Welshmen had been entrapped by Federal recruiting agents, the local police instituted enquiries amongst the miners, but they were unable to elicit any information which would justify them in interfering with the departure of the steamer. There is, however, very little doubt but that the men have been engaged for mining operations of a character the reverse of peaceful, and that on arriving at New York they will be treated like the passengers of the ship *Great Western*, which sailed from Liverpool a few months ago.

The arrivals at Swansea include—the Hastings, from Hondeklip, with 506 tons of copper ore, for Richardson and Co.; the Tom Scott, from Cherbourg, with 110 tons of iron ore, for the Governor and Company of Copper Miners; the Joseph Thompson, from Coquimbo, with 228 tons of bar copper, 121 tons of copper regulus, and 275 tons of copper ore, for Charles Lambert; Medea, from Kragero, with 400 tons of nickel ore, for Vivian and Sons; the Florence, from Cuba, with 505 tons of copper ore, for the Cobre Mining Company.

THE ABERAMAN IRONWORKS COMPANY (LIMITED).—Several of the directors of this company visited the Aberaman on Thursday, in order to inspect the works and estate. They have not yet taken actual possession, but after this inspection it is expected that there will be no delay in the works coming into the hands of the company.

THE PATENT LAWS: RECOMMENDATIONS OF THE COMMISSIONERS.—The following are the reccommendations of the Commissioners appointed to enquire into the working of the law relating to letters patent for inventions:—"1. Your Commissioners do not find that the present cost of obtaining letters patent is excessive, or the method of payment inconvenient; they do not, therefore, recommend any alteration of the present system on those points; but they think that patent fees should not be made to contribute to the general expenditure of the State until every reasonable requirement of the Patent Office has been satisfied.—2. They are unable to reccommend a preliminary investigation into the merits of the invention for which a patent is claimed; but they advise that a careful enquiry be instituted, under the direction of the law officers of the Crown, as to whether there has been any previous documentary publication of the invention, either by grant of letters patent or otherwise; and if such publication has taken place, that the patent shall be refused. No evidence other than such documentary evidence should be admissible, and the reasons for the refusal to grant the patent should be certified by the law officers; an appeal from their decision should lie to the Lord Chancellor.—3. Your Commissioners are of opinion that the present mode of trying the validity of patents is not conducted in a satisfactory manner. That such trials ought to take place before a judge, sitting with the aid of scientific assessors, but without a jury, unless at the desire of both parties to a suit or action. That such assessors ought to be selected by the judge in each case, and the remuneration to be paid them be included in the costs of the suit or action, and provided for in such manner as the judge shall direct. That no special judge be appointed for the trial of patent cases, but the judges of law and equity be empowered to make rules by which one court should sit for trial of patent cases exclusively. That on such trial the judge, if sitting without a jury, decide questions of fact as well as of law.—4. That the granting of licences to use patented inventions ought not be made compulsory.—5. That patents ought not to be granted to importers of foreign inventions.—6. That in no case ought the term for which a patent is granted to be extended beyond the original period of fourteen years.—7. That in all patents hereafter to be granted a proviso shall be inserted to the effect that the Crown shall have the power to use any invention therein patented without previous licence or consent of the patentee, subject to payment of a sum to be fixed by the Treasury.—8. While, in the judgment of the Commissioners, the changes above suggested will do something to mitigate the inconveniences now generally complained of by the public as incident to the working of the Patent Law, it is their opinion that these inconveniences cannot be wholly removed. They are, in their belief, inherent in the nature of a Patent Law, and must be considered as the price which the public consents to pay for the existence of such a law."

NORTH OF ENGLAND INSTITUTE OF MINING ENGINEERS.

On Saturday Feb. 4, a meeting of the members of this Institute was held in the rooms of the Institute (Mr. N. WOOD, President, in the chair). The SECRETARY read the minutes of the Council, which contained a recommendation that a meeting of the members should be held this year in Manchester. The PRESIDENT said the question lay between South Wales and Manchester, from both which localities a pressing invitation had been received. Both places were suitable—the South Wales coal field was a very extensive one, varied in its character, and very interesting. Mining had not reached so high a standard there as in Lancashire, and, therefore, if the Institute was to be of any use in diffusing information, South Wales would be a very proper locality to visit. But the same might be said in some respects with regard to Manchester. And, moreover, there would be more accommodation in Manchester, several societies there having rooms very well adapted for the meeting. They had been very much pressed by Mr. Dickenson, who was a member of some of these societies, to go to Manchester. He was a gentleman of some reputation. He and Mr. Atkinson, who stood exceedingly high in this locality as an Inspector of Mines, had visited Belgium, and investigated the mode of ventilating by machinery to a very considerable extent. Sir George Grey was anxious that all the information possessed by the Inspectors on this subject should be communicated to the trade at large. He believed that Mr. Dickenson and Mr. Atkinson had a mass of very valuable information on the subject to communicate, and probably Manchester would be a more proper place than South Wales for the discussion of this subject. He assumed, from past experience, that the members of the Institute would be in favour of furnace ventilation; and he believed the system of machine ventilation was rather prominently brought forward in the neighbourhood of Manchester. Indeed, he ought to remark that it was a good deal thought of in South Wales, and he hoped the meeting being held in Manchester would not prevent the South Wales people from giving them all the information they could respecting their machines, some of which he believed were extremely efficient.—A motion to the effect that the proposed meeting be held in Manchester was carried by show of hands.

DISCUSSIONS POSTPONED.—The discussion on Mr. Hedley's paper on "The Coal Field of Nova Scotia" was postponed, owing to the absence of Mr. Hedley, and at his request.

THE BELGIAN MINERS' RELIEF FUND.—Mr. MORISON said that if this subject were properly gone into by some of the mining engineers of the district, it might be productive of some good results. The Miners' Relief Fund of this district, so far as it had gone, had been useful, and he thought some of the principles of the Belgian Institution might be grafted upon it with considerable advantage.—The PRESIDENT said that one great feature of importance attached to the mining fund in Belgium which was not in the fund of this district. It was partially supported by the Government of the country. It was, therefore, a recognised fund, subscribed to largely and patronised by the Government of the country.

BOUNDARY BETWEEN THE MILLSTONE GRIT AND MOUNTAIN LIMESTONE.—A paper, by Mr. HOWSE, on this subject came on next for discussion.—The PRESIDENT said he was sorry that Mr. Sopwith, who had proposed a new arrangement for the millstone grit and mountain limestone, was unwell, and unable to be present. According to the present arrangement, they had the coal measures down to the millstone grit, then the millstone grit down to the first bed of limestone, and then below that the mountain limestone series. Mr. Sopwith proposed that the boundary of the millstone grit should extend below the first bed of limestone, down to the second bed, called the Little Limestone. The first bed was called the Fell Top Limestone, as it generally cropped out at the top of the Fells. He proposed that there should be one group from the top of the millstone grit down to the Little Limestone.—Mr. HOWSE said the matter was already decided, so far as geologists were concerned. If they altered the present boundary it would not then correspond to the one already used on the maps published by the Ordnance Survey of Scotland and the South of England.—Mr. G. B. FORSTER said, if the maps were wrong they would have to be altered.—Mr. BOYD said it seemed desirable to continue the division as it had been.—The PRESIDENT said he should hesitate to make any change from the present mode of classification. At the same time it was only due to Mr. Sopwith that he should have an opportunity of explaining his reasons for advocating such a change in the classification. He, therefore, moved that the discussion be postponed.—The motion was carried by show of hands.

NEW SAFETY-LAMP.—M. ALPHONSE DUMAR attended for the purpose of showing a new safety-lamp, invented by him, and which he named a phosphorescent light. Its advantage was that it gave a cold light, and it could, therefore, be used in places where the use of the Davy Lamp might be attended with danger. The light was obtained by an electrical battery, at a cost of 1d. for 10 working hours.—The PRESIDENT said the inventor had no idea of his lamp superseding the Davy lamp, but merely hoped that it might be useful in places of extreme danger.—Mr. EASTON said the principle of a phosphoric light was not entirely new. He had heard of a stale fish having been used for the same purpose.

VENTILATING MACHINE AT ELSWICK COLLIERY.—Mr. W. COCHRANE, of Seghill-house, next read a description of a ventilating machine used at Elswick Colliery. The ventilator is upon the principle of an exhausting fan; it consists of eight vanes, each of which is formed of 1¼ in. oak cleading, secured by bolts to a pair of bars and angle-irons, which are bolted to two cast-iron octagonal bosses, keyed on the main shaft, and interlaced, as shown in an accompanying drawing, forming a very firm structure, at the same time simple and inexpensive, admitting of a speed of as much as 150 or 200 revolutions per minute without danger. This is an important improvement in construction, as it will be seen from Mr. Atkinson's paper "On the Elsecar Fan" (vol. xi. of "Transactions of the Mining Institute") that the construction of it rendered a higher speed than 60 revolutions per minute dangerous. The outside diameter of the vanes is 23 feet, the width 6 feet 6·75 inches, and each vane extends about 8 feet into the interior of the fan, being inclined at an angle of 67·5° to a radial line through the apex of the octagonal boss. The main shaft is driven by a vertical direct-acting engine-cylinder, 23⅝ in. internal diameter, 19 11-16ths in. stroke, worked high-pressure. A wall is built on each side of the fan, giving about 1 in. clearance to the side of the vanes. Outside of one wall the engine is fixed, and in the other an inlet orifice of proper size is left—in the Elswick arrangement 10 feet diameter, such inlet being connected with the upcast-shaft.

An arch is carried over the face, giving about 2 in. clearance to the vanes, and in continuation of this arch an invert to a point about one-eighth of the circumference below the centre line, at which point the 2-in. clearance is increased gradually, expanding the lower curve of the casing till it ends in the sloping side of a chimney formed between the continuation of the side walls of the fan. A sliding shutter is fitted into cast-iron grooved rails for about one-fifth of the circumference, which enables the concentric circle of the top arch to be completed nearly round the fan,—that is, giving the 2-in. clearance to the vanes. This shutter is worked by a chain passing over sheaves at the top of the chimney and to the outside. For convenience a man-hole door is left at the foot of the sloping side of the chimney. The fan being set in motion, the air is drawn through the inlet from the mine, and discharged below the shutter into the chimney, from the top of which it is seen to issue at no great velocity. This system, called from the inventor the Guibal Ventilator, possesses important advantages over other machine ventilators—1. In the simplicity of construction;—2. In the arrangements for covering in of the fan;—and 3. In the shutter chimney. Experimental trials, however, are necessary to determi ne the best size of outlet for any particular mine. The fan at Elswick was constructed specially for the circulation of 50,000 cubic feet of air per minute, with a water-gauge of 1·5 in., which it was guaranteed to yield at 60 revolutions; and the generally satisfactory working of the ventilator has been established.

HYDRAULIC COAL-CUTTING MACHINE.—A very interesting paper was next read by Mr. W. EMBLETON, of Middleton Hall, near Leeds, "On the Hydraulic Coal-Cutting Machine." This machine is intended to take the place of manual labour in "nicking" or "kirving," or, as it is termed in Yorkshire, "baring" the coal. It is now regularly at work in the Kippax Colliery, near Leeds, where it has been in successful operation some months, and has been inspected by several members of this Institution. The only portion of the seam removed by it at the Kippax Colliery is a band of shale, which is also the usual place for baring by hand labour; no portion of the seam is, therefore, reduced to small coal by its action. The direction of the workings is towards the rise. While the machine proceeds with the "baring," completing the work at once going over, square pieces of wood and wedges are inserted loosely into the "baring" at intervals of 4 or 5 feet, to keep the coal in position till the colliers come to remove it. This slight support does not, however, prevent the coal so "bared" from detaching itself from the "unbared" part of the bed; the line of facture being a few inches beyond the extremity or back of the "baring," and in one even straight line. The quantity of coal obtained for every yard face is about 2 tons, and the yield of small coal produced by the breaking up the detached coal and the bottom coal about 6 per cent. Water is the force employed to work this machine, and being for all practical purposes incompressible, it exerts its full power, allowing for the friction in its passage through the pipes, even when transmitted from great distances. This self-acting apparatus consists of an hydraulic recip rocating engine working horizontally, or at any angle to suit the inclination of the coal-seam, or at any required height above the floor. The piston-rod is a hollow trunk or ram, into which is fitted a cut ter-bar, easily removed, carrying three or more cutting tools. These tools can be adjusted so as to enter the coal at any angle with the line of the face; the actual length of the cutting stroke into the coal is 16 inches, and, consequently, the three cutters conjointly give a total depth of 4 feet. The length of the cutting stroke can be varied according to circumstances. The cutting action of the tools being a steady push or thrust, without any percussion, it is necessary that the machine should be firmly held upon the rails during the cutting stroke, and be released so as to traverse forward at the end of the return or back stroke. This rigid fixing of the apparatus on the rails during the stroke is effected by means of a vertical self-acting holder, on which is a prolongation of the piston-rod of another cylinder, mounted upon and becoming a part of the apparatus itself. The piston-rod of this cylinder is actuated by means of the same self-acting valvular motion as that of the cutting cylinder, and the "holder-on" retain its "grip" by means of a small keep-valve, which retains the water during the cutting stroke. At the return or back stroke, the valve motion opens the keep-valve and releases the water, thus enabling the holder-on to descend and to slacken its pressure against the roof, and thns the machine is free to traverse upon the rails the requisite distance for the next cut. The traversing or progressive motion is also self-acting. More explanatory details are embodied in this paper respecting the construction of this valuable invention, which will appear in full in the "Transactions." The results, as at present obtained, give an average rate of cutting of about 10 yards on the face per hour, with a maximum under favourable conditions of 13 yards. The amount of pressure required for working the machine varies from 150 to 300 lbs. per inch, according to the hardness of the material. The results obtained by the experiments at Kippax are of a most satisfactory nature.

After the reading of this paper, which was listened to with profound interest, the meeting separated.

CLEVELAND IRON.—Messrs. Gilkes, Wilson, Pease, and Co., at the Tees Ironworks, have blown one of their furnaces out, chiefly, if not entirely, for repairs; and it is their intention to put another out, from the same cause, in the course of a week or two. They are the oldest of their furnaces, and at present are only about 50 feet in height; but before they are put into blast again they will be raised to about 70 feet, to correspond with the newer furnaces adjoining. The putting out of these furnaces is, we may suppose, the commencement of a considerable number which must go out during the year; and the certainty of this being the case should weigh with those who fear a large increase in the production of metal in this district,—an increase which they conclude will prevent pig metal rising to what they consider a satisfactory figure for some time to come. It would also appear that the cry of over-production from other districts has become contagious. There is little in the statement of stocks, or the present condition of the trade, to justify this. But it is undoubtedly the case, that the older ironmasters, who had the pig metal trade of the district rather exclusively to themselves, look with apprehension at the doings of their younger neighbours, and make a matter of increase in producing a much more certain thing in the future of this year than increase in price.—*Darlington and Stockton Times.*

THE SLATE QUARRIES OF CORNWALL.

Grouped within a few miles of Camelford, in the north-east of Cornwall, lie those quarries which have made that county one of the great slate-producing districts of the United Kingdom. Neither so well known as those of Valentia, nor so extensive as those of North Wales, they are yet, in their degree, of great value. So large, indeed, is the capital invested in them, and so rapid the progress made in the development of their resources, that their importance must steadily increase, and with it the prosperity of the neighbourhood in which they are situated. Although descriptions have been published both of the Irish and Welsh quarries, the peculiar features of those of Cornwall have failed to be recorded. We purpose to supply the deficiency in the present article, which, it is hoped, will neither be without value to the commercial man nor without interest to the general reader. The chief slate quarries of Cornwall—named in their order from west to east—are the following:—Camel, Delabole, Bowithick, Trewarmatt, Tintagel, Growa, and Beeny, or East Delabole. Of these Delabole claims our chief attention, as being at once the oldest and largest of these works. It is far larger, in fact, than all the others put together.

It would be interesting, but it would seem to be impossible, to trace the history of the Delabole Quarries. That they were known and valued some 300 years ago is clear from the statement made by Carew in 1602, that the Delabole slate was "in substance thin, in colour fair, in weight light, in lasting strong;" and that besides the supply for home provision, "great store was yearly conveyed by shipping, both to other parts of the realm and also into Britaine (possibly Brittany) and the Netherlands." Considerably later, we find Dr. Borlase stating that the Delabole slate "was, perhaps, the finest in the world." But, although it is so plainly evident that the quarries must have been worked at a very early period, it is not the less apparent that the workings of the "old men," as the original quarrymen are locally called, must have been on a very small scale. Machinery, in fact, was introduced for the first time at a period quite within the memory of the oldest inhabitant; and we have been told how, from carrying the slate out of the quarries on their backs, the workers rose to the windlass, thence to a whim, upwards again to a water-wheel, until finally large steam-engines were erected. Men still employed at Delabole were eye-witnesses of, and partakers in, these changes. It is not so very long since, as compared with the origin of the quarry, that the most important of these advances were made, and quite recently that Delabole has assumed its present importance. At one time it was the property of various proprietors, and the different quarries, which now make but one great pit, were then separate. Previously to the formation of the old Delabole Company, who now carry on the entire undertaking, the works were successively in the hands of Mr. Bake, Messrs. Grainger and Trickett, and Mr. T. R. Avery. The company succeeded Messrs. Grainger and Trickett, and then purchased Mr. Avery's interest It is said that 40 years ago there were only 12 quarrymen at Delabole. There are now employed, in immediate connection with the quarries there, between 600 and 700 men, who are divided into different departments, each under a separate foreman. The quarries form one huge pit, which has an area of between 14 and 15 acres, and is in parts 350 feet in depth. From the surface of the ground to the top of the immense slate rubbish heaps which surround the quarries is over another 100 feet, so that the workings extend nearly 500 feet perpendicularly. It is an ordinary thing for a mine shaft to be of much greater depth than this; but the superior magnitude of the Delabole Quarries, as compared with most extensive mines, will be recognised when it is considered that the former is an open working, and not a series of shafts and galleries.

At the time that the Delabole establishment consisted of only a dozen men, they were without the aid of machinery. Now there are four engines, averaging 50-horse power each, employed in drawing stuff from the pit, and a fifth is shortly to be erected; an engine of about the same size, and one much smaller, are used for the purposes of manufacture; and a turbine wheel, aided by a steam-pump, is busily occupied in the work of drainage, whilst another set of pumps is being put up. In addition to these means of originating power, there are a host of appliances for turning that power to account. Each of the four drawing-engines is in connection with a wooden framework overhanging the pit. These frameworks are called poppet-heads, and have pulleys in their upper portions, over which the chains run that draw the slate and refuse to the surface. Beneath these pulleys are tables communicating with tramways, which are moved backward and forward by means of windlasses. On to these tables, truck carriages, or "cradles," are run, and they are then pushed out to the extent of the framework, in order to receive either the laden iron box-tops of the trucks, which are lowered down into the pit to be filled, or the larger slabs of slates. Moveable guide-chains are used to bring the lifting-chains to the places where they are wanted. Whatever is brought up is placed upon a carriage, which, is then pushed on to the tramway, and taken to its destination, horses in some cases drawing the trucks up the inclines to the top of the rubble heaps; endless chains, worked by the engines, being elsewhere used; whilst in one or two instances advantage is taken of the force of gravitation. In order to remove with more facility than the engines working by the poppet-heads can do it (although they will draw from 300 to 400 loads each per day) a quantity of rubble in the bottom of the pit, an incline thither is now in course of construction, in which as is usual, power will be economised by the desent of one set of wagons being made in connection with the ascent of another. When the slate has been raised, it is at once manufactured, and is chiefly made into flooring slabs or roofing slates, though it is available for a number of other purposes. A visitor to Delabole may see that it will serve either as a billiard-table for the living or as a tomb for the dead; as a vessel to contain water, or as a means of throwing water off; as the flooring of a cellar, or as the cresting of a roof-ridge; as a hearth-stone, or as a mantle piece. The slabs raised at Delabole are sometimes of very large proportions—containing when dressed, 140 superficial feet and more—but such would rarely, if ever, be required, and they would, therefore, be converted into more useful sizes. Formerly the slabs all used to be cut by means of the old frame-saw; but for those below a certain size machinery driven by steam is now used at Delabole. There are in that establishment eight of what are called water, or engine-saws, and three circular-saws, which are adapted to deal with different varieties of the stone. By those means, slabs of 8 feet long by 6 feet wide, and downwards, can be cut, the smaller circular-saw utilising some of the smaller stuff that would otherwise be of little value. The surfaces of the slabs are dressed by means of a plane—a cutting edge of steel—beneath which the stones, fixed in a frame, are drawn. If the slabs are required to be still more highly finished, they are polished in another piece of mechanism, which rubs them with sand one upon the other.

The manufacture of roofing slate is a very simple process; but is the best test of the quality of the stone, only the superior sorts of which are fit for the purpose. If the superficies of the pieces of slate be too great, they are broken into suitable sizes by a process called "flerrying;" then they are split into layers, with wonderful dexterity, by means of a chisel and mallet; next they are cut to their proper dimensions, and finally stacked. The various kinds of roofing slate are very curiously named, and represent all classes of society. The largest descriptions, but which have no fixed dimensions, are called "rags." The smallest sort, of irregular shape, is termed "scantle." But those which are regularly formed rejoice in the following designations:—queens, princesses, duchesses, marchionesses, countesses, viscountesses, ladies, small ladies, and doubles. The largest queen is 36 inches by 18; the smallest lady, 14 inches by 7, and the size gradually decreases with the rank throughout. All the slates with the exception of the two smaller sizes are packed in what are called five dozens of 63, and are placed on their ends with no others above them; small ladies and doubles are packed in rows up to 100 dozen, and four rows above each other. At the date of our visit to Delabole, there were acres of manufactured roofing slate to be seen at different parts. There is of necessity great division of labour in a slate quarry; nearly the whole of the hands in which are paid by the piece, either by contract or according to a scale. Thus quarrying is one branch, loading and emptying the waggons another, splitting a third, cutting a fourth, stacking the roofing slate a fifth, and stowing the manufactured article for despatch a sixth; whilst the operations in the manufacture of flooring, &c., are also separate. The establishment at Delabole is furnished with engineers' and carpenters' shops.

Nearly the whole of the produce of these quarries is shipped from Port Gavern, distant about five miles. Delabole itself is not more than two and a half miles from the coast, but suitable places for shipment in that neighbourhood are rare. Port Gavern has simply a beach whereon the vessels run. Then at low tide the waggons of slate come down alongside, and their contents are put on board. In this work about thirty carts are employed, by means of which a 60-ton vessels can be loaded in a tide. The exports from Port Gavern ranges between fifteen and twenty thousand tons annually, comprising in from 200 to 300 cargoes—all from Delabole.

The proposed Launceston, Bodmin, and Wadebridge Railway will pass within about two miles and a half of the quarries; and its execution will increase the facilities for carriage. Much material that has been, and is now being, thrown away could then be made profitable.

In speaking of the other quarries, we need not go over the ground that has already been traversed. It will be sufficient, therefore, that we should call attention merely to the chief facts respecting them.

Bowithick quarry is situated on the road from Delabole to Tintagel. It is the property of Messrs. Roseveare and Hawker, and gives employment to about 60 men. It is worked in the side of a hill to the depth of 225 feet by the assistance of a water-wheel. Its produce, which is good, is shipped at Boscastle.

On the opposite side of the valley to Bowithick is Trewarmatt Delabole, the property of Mr. Gill. Here a pit has been worked 120 feet deep from grass. The machinery is moved by water-power. About a dozen men are employed; and the slate raised is shipped from Boscastle.

Hard by is Trenwith, a quarry belonging to Mr. J. Bayly, of Plymouth, but not at present in operation. These three places are about a mile from the sea.

On the coast there are several quarries, some of which are of a very important character. The depth to which they are worked is, however, limited by the water level, which operates unfavourably on their productiveness, and prevents the good beds of slate when they are found from being followed up and developed. For our readers must understand that the finding of a bed of slate fit for quarrying is as great a lottery as the finding of a paying metal vein, and that slate quarrying is in reality pretty much the same sort of speculation as mining. Cliff quarries have, however, the advantage of being easily able, and at small cost, to get rid of their refuse.

The nearest coast quarries to those just named are Baggalow, also belonging to Mr. Gill, in which about 30 hands are employed, and a smaller one, worked by a Mr. Sweet. Then comes Lambshouse Quarry, the property of the Rev. Mr. Kinsman, of Tintagel, which is worked by a whim, and is wrought by some twenty men. Most of the slate is shipped at Boscastle, but a small quantity also is dispatched from Tintagel.

At Growa, within a mile of Boscastle, some extensive cliff quarries are being actively worked by 40 men. There is a whim; but the principal feature of interest in those quarries, as regards machinery, is an economical mode of applying water-power. An incline—a quarter of a mile long—has been constructed for the purpose of bringing up the slate; and this incline is worked by what is called a water balance. There are three rails, which, with a fourth rail laid down for a short distance midway, practically form two lines, on which two trucks or "trollys" run. These trucks—which bear transversely smaller trucks for holding slate—are connected by a steel rope, which passes round a horizontal wheel at the head of the incline. This wheel is Fowler's patent pulley, the flange of which is made in small segments; these move on a hinge, and in action the rope as it enters closes the segments, and causes them to press tightly upon it. The rope is thus firmly held. This ingenious and excellent arrangement has long been used by Mr. Fowler in steam ploughing. It not only supplies the place of large winding-drums, but it saves half the rope which would otherwise be required. The principle of action of the balance is simple enough. The body of each truck consists of a water-tight box, capable of holding about two tons of water, for the supply of which there is a pipe at the head of the incline. An empty truck being at the foot of the incline, the carriage which it carries is loaded with about a ton of slate; the truck at the upper end is next filled with water, the wheel is then put in motion, and the water-laden truck descends by the force of gravitation. As a natural consequence it pulls up the lighter load at the

other end of the rope; and when the trucks have completely exchanged places, the slate-laden carriage is run off the higher one on to the tramway, whilst the water is suffered to run out of the truck at the lower end, which is next loaded. Then the upper truck is filled with water, and the operation is repeated. At these quarries a boring machine has been introduced, similar to machines which have been in operation at the Penrhyn Quarries, in North Wales, for two years, and by means of which holes six inches in diameter and 20 feet deep can be bored in a few hours.

The East Delabole Quarries are at Benny, about two miles to the eastward of Boscastle, whence they ship. These are likewise cliff quarries, and are worked by about 20 men. There are at East Delabole whims, and an incline of considerable length.

The shipments of slate at Boscastle, which are made in a similar way to those at Port Gaverne, comprised last year 44 cargoes, of 2050 tons.

The last quarry which we have to mention is that of the Camel Company, situated in the parish of St. Breock, a short distance below Wadebridge. This quarry is worked by a company of gentlemen, who seem content to carry on their operations without much noise. In addition to 1800 tons of slate and slabs shipped last year, upwards of 1600 tons have been sold and sent off inland, the slabs being of large dimensions and the quality exceedingly good. There are two steam-engines at work in drawing the stone from the pit and driving the machinery (which is very complete) for plaining, sawing, and preparing the slate for the market. More than 100 men are employed in the pit and on surface, and when the large "head" which is now being taken down is removed more hands will be required. Should the projected Launceston, Bodmin, and Wadebridge Railway be carried out—which is earnestly desired by all parties in the locality—it will greatly facilitate not only the quarries but most other works in the neighbourhood.

Of the surroundings of the quarries there may this be said:—A Cornish Hugh Miller, though he would not discover in the slate rocks that material for palæontological researches that his Scottish brother did, would yet find ample food for the imagination, and an abundant store of beauty to delight the eye; and if legendary lore should attract him, he could nowhere be better placed than in a neighbourhood where are the remains of that grand old castle of Tintagel, round which cluster the many graceful and noble mythic histories which make the whole country-side redolent of "Good King Arthur." The locality will, however, be chiefly visited with a view to the commercial development of a material of universal consumption, and which has been found in the neighbourhood of such excellent quality, that the slate quarries in the north of Cornwall have already become successful competitors with those of North Wales.—*Western Morning News.*

COAL-CUTTING MACHINERY.—An engine has been designed by Mr. J. A. Reed, of New York, which, although originally intended for an entirely different purpose, would probably be applicable as an economic means of compressing air for coal-cutting machines and similar purposes. It is a combination of two oscillating cylinders, both placed in line, and acting on a crank shaft between them. One cylinder is for steam, 8 inches bore; the other is for pumping air, 5¼ inches bore. They are without valves or valve gear, and may be run at high speed without the clanking and concussion usual in pumps; and this is claimed as a great advantage in an air-compressing engine, which must run fast in order to overcome the resistance of the compressed air near the end of the stroke, when the fly-wheel is not inconveniently heavy, and only one steam cylinder is used. The distribution of steam in this engine is effected by the relative positions of the steam and exhaust ways in the framing and in the cylinder. The sides of the cylinders near the ends are planed, and have ports opening into the cylinders, the ways being as short as possible, so that there may be the least room to be filled by steam that does no work. The side frames are cast with steam and exhaust ways in them, and faces are planed on them to fit against the faces on the cylinders, and the openings are so situated that steam is admitted and exhausted properly. There is but little lap, just enough to avoid blowing through; but this is deemed suitable for an engine that compresses air, and has its greatest resistance during the last half or third of the stroke. The same arrangement of ports and ways is suitable for the air-pumping cylinder, the clearing space being as small as possible. To lessen the clearance space a little crude petroleum should be admitted with the air, which will lubricate the piston and cylinder faces, and prevent leakage of air. There is a fly-wheel which carries a belt when it is required to use the engine for boring or other work, in which case the air-pumping piston-rod is disconnected from the crank pin. The boiler is of the form most favourable to strength, and made strong enough to work with perfect safety at 150 lbs. pressure. The air pressure will sometimes be 250 lbs. Under such a pressure the common slide valve would work with much friction, and would probably wear fast; but in this engine the pressure tends to prevent wear, and produce leakage. The leakage is visible outside, and can be stopped by screwing up the nuts on the rods which hold the frame to the cylinder while the engine is running.

HEWING COAL.—The nature of the invention patented by Mr. James Russell, jun., of Falkirk (but void by reason of non-specification), consists in improvements in the machinery, whereby, for the purpose of hewing coal or other mineral, a horizontal, or nearly horizontal, groove or slit is cut in a stratum of such mineral. In one form of such machinery, as at present used, the cutting apparatus resembles a pickaxe, working about an upright, or nearly upright, axis with a reciprocating motion, being drawn back after each stroke. In another form, a horizontal revolving axis penetrates into the groove, and is armed with tooth-shaped removable cutters. In the improved machinery the cutting apparatus consists of toothed-shaped removable cutters, carried on the edge of a flat disc, or of a set of radial arms, which move with a continuous revolving motion in the plane of the groove, about an upright axis, which is supported in a suitable frame or carriage outside the groove, and driven by steam, water, or other suitable motive-power, transmitted by means of compressed air, wire-ropes, or other suitable mechanism. In some cases he uses a set of cutters, which are all of the same size and shape; in other cases, he uses cutters which are either alternately larger and smaller, or which form series of three or more of progressively increasing dimensions, the smallest being in front, so that the foremost cutter of a series cuts a small groove, and the next enlarges that groove, and so on. The advantages of the invention are increased steadiness and economy of power, by the substitution of continuous revolution for the reciprocating motion of the machine at present commonly used for coal hewing, which acts like a pickaxe, better worked by the back of the groove being cut straight instead of being notched, as it is by the said machine, with the reciprocating motion; and greater efficiency, by the machine itself clearing the dust out of the groove, which none of the present machines do, inasmuch as the cutter, or point of the picking machine, being drawn back after each stroke leaves the dust and fragments in the groove, and the machine, with the axis rotating in the groove, also leaves the dust and fragments lying in the groove behind the axis, as it advances sideways. With the improved machine the groove is swept quite clean.

PULVERISING AND AMALGAMATING.—Some twelve months since an apparatus was patented for Mr. Carl Leffler, of Broad-street-buildings, which consists essentially of a horizontal cylinder or cylinders, in which metal or other balls are placed together with the material to be reduced to powder. The openings for admitting the material being closed by doors or stoppers, rotary motion is given to the apparatus, and the balls are thus set in action and caused to crush the friable material placed with them in the cylinders. The object of his present invention is to render the apparatus applicable also for mixing auriferous ore with mercury to effect the amalgamation of the gold, and in general to effect the combination of liquids with friable substances. To this end he mounts the cylinder on a hollow axle, or on hollow trunnions, and connects the axle or trunnion with an elevated cistern or reservoir containing oil or water, as the case may be. If the hollow axle passes through the cylinder he pierces it with holes that it may distribute the liquid over the material contained in the cylinder, and he regulates the supply of liquid by means of suitable taps. To fit the apparatus for treating auriferous ores, he connects a pipe leading from a mercury reservoir with the stand-pipe leading from the water cistern, and by that means run the mercury into the cylinder with the water. If it should be thought desirable to heat the contents of the cylinder, he connects the stand-pipe, or the opposite trunnion or end of the hollow axle, with a steam-pipe leading from an adjacent boiler, and can thus by a regulating tap in the steam-pipe supply any required amount of steam to the cylinder. At the ends of the cylinder he provides taps for discharging the water and light floating particles from the cylinder prior to removing the mixed oramalgamated material.

GOLD AMALGAMATION.—A new amalgamating pan, claimed to be an improvement upon the Freiberg pan, has been invented by Mr. Kenyon, and introduced in the mines of Colorado. It is described as having a main arm resting on the head of a spindle, and driven by gearing beneath the pan. The arm reaches across the centre, and extends on each side half way from the centre to the circumference. At each end is an upright shaft, to which is attached a cluster of mullers, eight in each cluster. They are shaped like a flat-iron, 13 in. wide at the head, and are made of French burr. To the top of the cone is attached a stationary cog-wheel, into which there works pinions attached to the upright shaft, thus giving the mullers a constant rotary motion, besides its motion around the pan. The advantages gained are a perfectly even wear all over the pan bottom, and the prevention of the centrifugal motion of the water which drives the ores before the mullers. The capacity of the Freiberg pan is 1 ton every 24 hours, while this pan will thoroughly digest 4 tons in the same time.

MOTIVE-POWER.—Some few months since an invention was patented by Mr. James Parker, of Camberwell, which consisted in obtaining motive-power from steam generated in a boiler combined with atmospheric air in larger or smaller quantities, according to the pressure required, by discharging the steam in small jets, each of which was to be opposite to a pipe or air nozzle, which received the steam-jet after it had passed through the air between the point of issue of the jet and its entry into the air nozzle, which communicated with a receiver in connection with the cylinder, or directly with the cylinder, as in an ordinary steam-engine; the steam-jet in passing through the air into the open end of the air nozzle drawing with it atmospheric air, which thus becomes heated and increased in bulk or pressure. He has since provisionally specified some improvements upon this, which consist in heating the receiver or cylinder, or the communications thereto, by other heat than that contained in the steam, so as to superheat, or surcharge with heat, the combined steam and air, and thereby obtain a further expansion. He proposes to re-use the exhaust and repeat the process described in a second cylinder. Subsequently the mixture is condensed, and the "aerated water" is used in cylinders with flexible sides, to obtain more motive-power. He proposes further to employ the heat of the steam after being used to warm the air before it enters the furnace, and thus economise fuel. From the experiments made, he thinks" the economy is equal to nearly one-half. "The steam also when largely diluted with air becomes or acts as fuel, or otherwise greatly aids or assists the heat of the furnace, and enables cheaper kinds of fuel to be employed, and also other substances, such as chalk or other limestone, to be mixed therewith and burat in the furnace." He prevents oxidation of the ironwork by coating it with fire-clay.

PUDDLING IRON AND STEEL.—The invention patented by Mr. Henry Bennett, of Wombridge, Salop, consists, firstly, of improvements in puddling iron, steel-iron, and steel, by submitting the pigs to a strong heat prior to their introduction into the body of the furnace to be puddled. This he effects by placing hollow bars, with water running through them, over the fire-gate, or over the body of the furnace, at a distance of some 6 in. from the crown. Upon these water-bars are laid the pigs, introduced through doors in the end of the furnace above the fire-door, and as one heat of metal is being drawn, the pigs are removed into the position in the puddling-chamber, where they are from 20 to 30 minutes in the process of puddling each heat, and, of course, a corresponding saving of fuel is also effected. The second part of the invention consists of certain improvements upon a former invention, dated May, 1863, and which has been already described in the *Mining Journal*. Upon the top of the puddling-furnace he places a quadrant guide, supported in suitable carriers. Around this quadrant guide moves a radial bar from a pivot at the centre of the circle, of which the quadrant forms a portion; from the same bed plate, supporting the quadrant on the top of the furnace, is supported a long rod hung on friction rollers, from which runs a connecting-rod, which gives motion to the radius-rod travelling round the quadrant, and also supports the puddler's rabble. The necessary change motion of the radius-rod may be obtained as in the former patent, or by a crank fixed to a slow-motion shaft, and a connecting-rod attached to the radial bar moving round the quadrant guide. One furnace being fitted with the change motion or reversing gear, any number of furnaces may be worked by it by merely placing them in gear by means of connecting-rods and bell-crank action.

FOREIGN MINE AND METALLURGICAL NOTES.

[FROM OUR PARIS CORRESPONDENT.]

At the *séance* of the Academy of Sciences, in Paris, Mr. A. Terrell presented the analyses of different mineral substances brought by Mr. Bocour from the kingdom of Siam. These comprise two ores of gold, a hyaline corundum, a bitumen, an iron ore, a sandstone, and two clays, one containing peculiar concretions. One of the ores of gold is in scales; it is found in the Pachim ravines, to the north-east of Bangkok; the other is in grains, and comes from Bantaphan, in the Malay Peninsula. These ores have been thus analysed:—Ore in scales from the Pachim Ravines—Gold, 88·57; silver, 6·45. Ore in grains from Bantaphan—Gold, 90·89; copper, 1·42; silver, 8·98; silica, 3·33. The hyaline corundum, or Oriental emerald, brought by Mr. Bocour, is found on the east coast of the Siamese dominions in the Chantaban Province. The specimen analysed is dichroic, its ordinary colour being very deep bottle-green, but, when light is transmitted through, it is of a beautiful violet-blue. Its fracture is lamellated, and its specific gravity, at 15° centigrade (59° Fahr.), is 3·933; it is composed of—

Alumina	96·19
Protoxide of iron	4·10
Silica	a trace=100·29

The bitumen was found on the coasts of Cambozo; it is of a beautiful black colour, and yields on distillation a tar of a disagreeable odour, and a liquid strongly acid. When burned in contact with atmospheric air it gives a strong odour of sulphur, and leaves a rust-coloured ash. It consists of—Fixed carbon, 59·20; tars and volatile oils, 6·50; acid liquid, 18·40; gas, 13·29; ash, 2·61, in 100 parts. The iron ore was brought from Pexaban. It is of a dark reddish brown colour, is attacked by the acids, and its composition corresponds with a hydrated silicate of peroxide of iron, having the following formula:—Fe O_3, 3 Si O_3, 2 HO. The sandstone was from Singapore. It is of a reddish colour, owing to the presence of peroxide of iron, and consists of grains of quartz, not very strongly adherent. The clays were of two sorts—one from Singapore, found lying under the sandstone, is grey, with reddish coloured veins, rather plastic, and capable of supporting a high degree of heat without alteration; the other is from Bangkok, of a reddish grey colour, is not plastic, nor capable of resisting heat as well as the last. In this clay concretions are found differing altogether in composition from it; they consist exclusively of a carbonate of the protoxide of iron, or of peroxide of iron produced by the decomposition of the carbonite of protoxide and carbonate of manganese. Very soft when first taken out of the clay, they harden when exposed to the air, and the colour, at first of greenish brown, becomes of a reddish brown. Their size is about 1½ to 2 inch long, by two-fifths to four-fifths of an inch in diameter, and their shape very irregular.

The Paris and Orleans Railway Company has submitted to the superior authorities the following special rates to be charged on metallurgic produce:—Cast-Iron: From Mons to Angoulême, 21 frs. (16s. 8d.); to Rochelle and Rochefort, 15 frs. 50 c. (12s. 4d.), including expenses of loading and unloading.—Iron in Bars: Angle-iron, wrought-iron plate, not exceeding 2 millimetres (8-10ths) in thickness, from Mons to Angoulême, 21 frs.; to Rochelle and Rochefort, 15 frs. 50 c., including station expenses, per waggon of not less than 10 tons—or paying for this weight if the expéditor chooses—expenses of loading and unloading to be paid by the expéditor or the consignee.

It is said that the French Government is deliberating about allowing one year more to the different companies for the time of finishing the various lines undertaken by them. This is to avoid their being obliged to emit obligations, which they would otherwise have to do, calculated to effect more or less the conditions of public credit.

A new French company has been formed, for developing the sulphur trade of Sicily, and agreements have been made, not only with the proprietors of the mines, who form part of the company, but also with the Calabro-Sicilian Railways Company, which will establish stations and warehouses wherever it may be deemed necessary for the interests of the sulphur trade. The aim of the "Company of the General Magazines and Sulphur Mines of Sicily" is:—1. To work directly the sulphur mines in the localities of which they have possession, by the most improved processes of extraction.—2. To offer storage for, or effect the sale of, the produce of other workings that may be committed to their magazines.—3. To develope the sale of the sulphurs of Sicily throughout Europe, and regulate the sale by means of depôts opened at the principal places of consumption.

WELDING IRON BY HYDRAULIC PRESSURE.—Mr. B. Duportail, an engineer, has been trying experiments upon the application of hydraulic pressure to forging and boiler. His experiments were especially directed towards the welding of iron under the hydraulic press, by which a permanent and almost indefinite pressure is produced, by which the welding is effected throughout the mass of the iron, and not merely at a small depth, as under the forge hammer. In his last experiments Mr. Duportail welded, without previous preparation, two pieces of iron, 1¼ in. square, after heating them to a white heat. The operation took place with the greatest ease; the iron was moulded like dough, and spread out at the sides whilst the pressure was in action. The pressure was stopped when the thickness at the joint was equal to that of the bars. After cooling, the piece was split in two for the purpose of examining the weld. The appearance was excellent, and one of the two pieces was put under a hammer of 1¾ ton, and struck three times, cold. The weld showed itself only under the second blow, and was not completely opened by the third.

PURSE FASTENING.—A fastening, patented by Mr. A. H. Williams, was recently specified by Mr. Henry, patent agent, Fleet-street. It consists of a pin terminating in a stud, under or over which is a neck of less diameter than the stud, but of greater diameter than the rest of the shank. This pin engages in a slotted plate, the orifice of which is composed of a broad hole, communicating by a slot with a narrow hole fitting the neck of the pin. The pin is capable of working up and down through plates, and is worked by a spiral spring abutting at one end against a dished head formed on the pin. When the neck is held in the narrow hole in the slotted plate the parts of the fastening are engaged, and so retained until released by depressing the pin and allowing it to clear the hole.

BOSSERT'S COMBINED ALBUM AND MUSICAL BOX.—The specification of this invention, just filed by Mr. Henry, the patent agent, Fleet-street, describes an album (especially for photographs) combined with a musical box, in such manner that on opening the book-cover the music will begin playing, and continue to play until the book be closed, or otherwise. For this purpose a cord or similar connection is attached at one end to a hinged portion of the cover, and at the other to a pin or stud sliding in a slotted bar in the musical box, which is fitted in a recess or chamber contrived at the back of the cover or case containing the album. When this part of the cover is opened the cord works the pin, causes it to act on a lever having a stop at one end, and thereby releases a wheel on the axis of the barrel, and allows the box to play a tune. When the cover is closed the cord will be released, and permit the lever to be brought back by a spring, and the stop drops into the wheel and checks it. The book slides in grooves in the bottom of the cover.

DUFFY'S UMBRELLA AND PARASOL HAND SPRING.—The specification of this patent, recently filed by Mr. Henry, patent agent, Fleet-street, describes the application and construction of a substitute for the wire now used for retaining and releasing the runners or travellers of umbrellas, parasols, and sun-shades. This contrivance consists of a lever working in a recess in the stick or handle, in which is fitted a spring. The lever is formed with a projection, and furnished with a stud or thumb piece. When the lever is pressed inward the projection clears a slot in the runner, and allows of its being slidden in the desired direction. But when the pressure is removed from the lever, the spring, being relieved, forces the projection outward, and allows it to pass through the slot in the runner, and to retain it.

COPPER IN SOUTH AUSTRALIA.—The statistics of the copper mines of Great Britain have created considerable interest here, as they have enabled us to compare the produce of South Australia with English mines. It appears that 222 English copper mines yielded last year 210,947 tons ore, worth 1,100,554*l.*, and produced 14,247 tons of fine copper. Now, 13 South Australian mines are producing at the rate of 58,000 tons of ore per annum, which at a very moderate estimate is worth half as much as all the ore from all the English copper mines; or say at 10*l.* per ton, 580,000*l.* The average produce of five-sixths of this ore we believe to be about 19 per cent., and of the remaining sixth about 13 per cent. The average produce of the Burra Mine is about 23, of the Moonta about 20, so that above 25,000 tons of ore raised annually average considerably over 20 per cent.; so that the produce of our 13 mines—four of which we put down as at present yielding only 1000 tons a year amongst them—would be in fine copper 10,500 tons, against 14,247 tons from the 222 English mines. We earnestly commend these facts and figures to friends of the colony, especially in England, and would express our firm belief that we are as yet but on the threshold of our mineral wealth.—*Adelaide Weekly Mail.*

RAPID CURE OF SEVERE COLD BY DR. LOCOCK'S PULMONIC WAFERS.—"To Mr. Winnall, bookseller, 108, High-street, Birmingham.—I have been troubled with a severe cold, which grew worse, and a difficulty of breathing, with tightness at the chest. Your assistant prescribed me Dr. Locock's wafers, and in a few minutes the tightness of my chest had entirely left, leaving only a slight cough, which left me next day." Sold by all medicine vendors, at 1s. 1½d., 2s. 9d., and 4s. 6d. per box.

HOLLOWAY'S OINTMENT—PAINLESS CURES.—Sores, wounds, ulcerations, and other diseases affecting the skin are amendable by this cooling and healing unguent. It has called forth the loudest praises from persons who had suffered for years from bad legs, abscesses, and chronic ulcers, after every hope of cure had long passed away. None but those who have experienced the soothing effect of this ointment can form an idea of the comfort it bestows, by restraining inflammation and allaying pain. Whenever this ointment has been once used it has established its own worth, and has again been eagerly sought for as the easiest and safest remedy for all ulcerous complaints. In neuralgia, rheumatism, and gout the same application, properly used, gives wonderful relief.

PROFITABLE COLLIERY INVESTMENT.—TO BE SOLD, for £8000, a COLLIERY, with PLANT, &c., in good working order. The output is steadily increasing, and will speedily reach 150 tons per day. The coal is on the Admiralty list, and of the best quality of Welsh steam coal, and a profit of 2s. per ton can be calculated upon.—Address, "A. B.," 14, Portland-square, Bristol. 48

THE LEASE of a FIRST-CLASS STEAM COAL COLLIERY, SOUTH WALES, FOR DISPOSAL, under very advantageous circumstances, well situated near a shipping port. Price only £1500. Could be made an extremely profitable affair. Good reasons for disposal.—Particulars of MR. JAMES REVELL, auctioneer and estate agent, 267, Oxford-street, W. 49

TO SLATE QUARRY PROPRIETORS AND OTHERS.—WANTED, by the advertiser, a SITUATION as MANAGER of SLATE QUARRIES. He has had many years' experience, and is thoroughly acquainted with the slate trade in all its branches.—Address, "Alpha," Post-office, Wadebridge, Cornwall. 50

TO INVENTORS AND PATENTEES.—A GENTLEMAN having an extensive connection with manufacturers, merchants, and others, would be GLAD to UNDERTAKE the SALE of INVENTIONS or PATENTED ARTICLES, on commission.—Apply to Mr. RAWLE, patent office, 14, Clare-street, Bristol. N.B.—Continental and foreign agencies solicited. 51

EXCELLENT OPPORTUNITY—JAMES'S COMPRESSED AIR ENGINE.—In consequence of advanced age and indifferent health, Mr. W. H. JAMES is ANXIOUS to MEET with an enterprising PARTY with capital to TAKE the ACTIVE PART in the DEVELOPMENT of the ABOVE, and SEVERAL OTHER very IMPORTANT INVENTIONS, who will be liberally treated with. Principals only (stating capital at command) are requested in the first instance to address Mr. W. H. JAMES, C.E., 844, Old Kent-road, London, S.E. 52

WANTED, TWO HUNDRED AND FIFTY EAST BOTTLE HILL SHARES (or any part thereof), and THIRTY MINERAL BOTTOM. An OFFER WANTED for ONE HUNDRED WHEAL TREVENNA SHARES.—Apply to Mr. EDWARD BREWIS, 73, Clayton-street, Newcastle-on-Tyne. 53

GREAT DEVON AND BEDFORD (COLCHARTON).—TWENTY-FIVE SHARES in this mine FOR SALE. The highest offer will be accepted.—Address, "G. D. B.," 2, Tivoli-place, Higher Broughton, Manchester. 54

THE PERRAN COPPER MINES, PERRANZABULOE.—The PROPRIETORS of these mines are DESIROUS of seeing them EFFECTUALLY WORKED, but the capital required is beyond their means. They now, therefore, INVITE the ATTENTION of mining CAPITALISTS to this fine MINING PROPERTY. The returns during the last working amounted to the large sum of £762,146, and by the present proprietors to nearly £6000 from above the adit level, and the entirety, including the plant, may be had on favourable terms. Reports from reliable mining authorities, and particulars, to be had on application to Mr. HITCHINS, St. Agnes; or Capt. T. PILL, at the mines. St. Agnes, Scorrier, February 1, 1865. 55

THE SOUTH RESOLVEN AND CEFN-MAWR COLLIERY COMPANY (LIMITED). Notice is hereby given, that ALL APPLICATIONS FOR SHARES in this company must be SENT IN to the bankers or brokers on or before SATURDAY, the 18th inst. By order, D. W. WILLOUGHBY, Sec. pro tem. 56

THE SOUTH RESOLVEN AND CEFN-MAWR COLLIERY COMPANY (LIMITED). Notice is hereby given, that the Directors will PROCEED to ALLOT the SHARES in this company on MONDAY, the 20th instant, and that the necessary works will be commenced as quickly after that date as practicable. By order, D. W. WILLOUGHBY, Sec. pro tem. 57

CAMBRIAN CONSOLIDATED GOLD MINES COMPANY.—Notice is hereby given, that the GENERAL MEETING of the Cambrian Consolidated Gold Mines Company (Limited) will be HELD at the offices, No. 9A, Great St. Helen's, E.C., on FRIDAY, the 17th day of Feb., 1865, at Two o'clock precisely. The transfer books will be closed on the 10th February, and be re-opened on the day after the meeting. By order of the Board, J. C. GOODMAN, Sec. February 3, 1865. 58

CONSOLIDATED COPPER MINES OF COBRE.—WANTED, for the COMPANY'S MINES at SANTIAGO DE CUBA, a FEW GOOD MINERS and ENGINEMEN.—Apply at the offices of the company, No. 72, Gresham House, Old Broad-street, London; or to the company's agents, Capt. JAMES PETHIE, Swanses, and Capt. JAMES H. REYNOLDS, Redruth, Cornwall. 59

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given that a DIVIDEND of ONE POUND PER SHARE, free of income tax, will be paid to the holders of certificates in this company, at the offices of the association, Gresham House, Old Broad-street, on and after Thursday, the 9th day of February next, between the hours of Eleven and Three o'clock. The proprietors must leave their certificates for examination three clear days before the day of payment. WALTER SHAIRP, GEO. WHITMORE, } Directors of the Company. Gresham House, Old Broad-street, Jan. 31, 1865. 60

TO THE SHAREHOLDERS OF THE COMPANY OF PROPRIETORS OF THE ROYAL CONSOLIDATED COPPER MINES OF SAN FERNANDO, CUBA (LIMITED).—Notice is hereby given, that a GENERAL MEETING of this company will be HELD at the London Tavern, Bishopsgate-street, London, on MONDAY, the 27th day of February inst., at Two o'clock precisely, to consider an account of the state of the company's affairs, and the progress that has been made in the winding-up, and also a report of the liquidators thereon. CUNME. BORTHWICK, THOMAS CLOSE, WALTER SHAIRP, W. D. STARLING, } Liquidators. Dated February 8, 1865. 61

ADELAIDE LAND AND GOLD COMPANY.—Notice is hereby given, that the Liquidators will be PREPARED to PAY a FOURTH INSTALMENT of SIX SHILLINGS AND SIXPENCE PER SHARE on Monday, the 20th February inst., and two following days, between the hours of Eleven and Two o'clock, as under. HANCOCK, SHARP, AND HALES 25, Birchin-lane, London, Feb. 10, 1865. (Solicitors to the Liquidators). N.B.—All shares must be produced at time of payment. 62

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., is in a position to give sound advice as to the sale or purchase of mining shares, the present being one of the most favourable opportunities for speculation or investment to result in large profits. List free on application. FOR SALE:—20 Uosewarne United, 25s.; 4 Wheal Margaret, £8½; 10 Minera Union (dividend), £15. BUYER of Chiverton and Central Minera. *** SPECIAL BUSINESS in Great North Laxey. 63

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon. MINES INSPECTED and faithfully REPORTED ON. DEALER in MINING, RAILWAY, and OTHER SHARES. His monthly Circular forwarded on receipt of six postage stamps. Wellington Chambers, 75, Cannon-street West, London, E.C. 64

MANCHESTER, AND WEST END OF LONDON.

MR. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER, ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER; and 31, REGENT STREET, LONDON, S.W. INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices. A Monthly Investment Circular on application. 65

MINING OFFICES, MANCHESTER.

THOMAS MOLYNEUX AND CO., MINE AGENTS, SHAREBROKERS, AND GENERAL COMMISSION AGENTS. Reliable information can be obtained as to purchase and sale of shares. Office of the Hazel Grove Silver-Lead Mining Company (Limited), Flintshire. Prospectuses, reports, &c., of this valuable property may be had on application to No. 28 Princess-street, Manchester. 66

CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN, via SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES to SURVEY and REPORT UPON ANY MINE. 67

CAPT. CHARLES WILLIAMS begs to inform all parties connected with mining that he is now in a position to UNDERTAKE CONTRACTS for the ERECTION of ALL KINDS of MACHINERY, LEVELLING or MAKING WATER COURSES and RESERVOIRS. Also, for TUNNELLING and SINKING ANY QUANTITY of GROUND, having always ready a sufficient number of machinists and miners to complete any work he may undertake, with punctuality and dispatch. References given if required. Tyn-y-Wern, Taliesin, via Shrewsbury, January 16, 1865. 68

MR. CHARLES BAWDEN, MINE AGENT AND INSPECTOR, ST. DAY, SCORRIER, CORNWALL, offers his services to capitalists holding mine shares in the county. C. BAWDEN having acquired a thorough knowledge of the Gryllis, Vor, and Chiverton districts, should be consulted at once; it will be the means of saving considerable losses, and in some cases effecting good profits. 69

MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C. 70

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO., PENHALLICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near WREXHAM, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe. For the convenience of their customers and others in the North, W. BRUNTON and Co. have recently erected a branch manufactory at Brymbo, near Wrexham, where, as at Cornwall, they are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE upon warrant that it will prove equal to, if not better than any to be procured elsewhere. 71

THE NEW CRAIG DDU SLATE COMPANY (LIMITED).

Registered under the Companies Act, 1862.
Capital £50,000, in 10,000 shares of £5 each. Deposit on application 10s., and 10s. on allotment.
No call to exceed 10s. per share, and at an interval of not less than three months between each call.
SECRETARY—Edward King, Esq.
OFFICES,—No. 22a, AUSTINFRIARS, OLD BROAD STREET, LONDON.
Only 4000 shares remain to be subscribed for. Prospectuses and every information can be obtained at the offices of the company.

THE OLD GUNNISLAKE MINING COMPANY (LIMITED).

Incorporated under the Companies Act, 1862.
Capital £48,000, in 9600 shares of £5 each, of which 4000 only remain for allotment.
5s. per share to be paid on application, and £1 per share on allotment.
Future calls of 5s. per share will be made if required, of which at least two months' notice will be given.
DIRECTORS.
RICHARD SOMERS GARD, Esq., M.P., Rougemont, Exeter, and 7, Dean's-yard, Westminster.
Col. R. M. BEACH HICKS, 1, Southwick-crescent, Hyde Park, London.
HARLES BURN, Esq., C.E., Little Fife House, Whitehall.
PIERCE POWER, Esq., 78, Fenchurch-street, London, and Morrison's Quay, Cork.
T. CHARLES GILL, Esq., Manager of the Tavistock Ironworks and Steel Ordnance Company (Limited), Tavistock, Devon.
BENJAMIN COBB, Esq. (Messrs. B. Cobb and Co.), 34, Fenchurch-street, London.
CONSULTING ENGINEER AND SECRETARY—Mr. Jehu Hitchins, St. Michael's House, Cornhill.
LOCAL ENGINEER—Mr. John Hocking, jun.
BANKERS—Metropolitan and Provincial Bank, Cornhill; Messrs. Gill, Sons, and Co., Tavistock.
SOLICITORS—Messrs. Courtenay and Croome, 9, Gracechurch-street, London; Messrs. C. V. Bridgman and Son, Tavistock, Devon.
AUDITOR—Mr. Maurice Thomas, 24, Basinghall-street, E.C.
OFFICES,—ST. MICHAEL'S HOUSE, CORNHILL, E.C.
Applications for shares to be made to Messrs. WATSON and CUELL, St. Michael's-alley, Cornhill; to the local Bankers; or at the offices of the company, St. Michael's House, Cornhill, where prospectuses and detailed reports of the most favourable character, by Mr. Jehu Hitchins, Mr. Nicholas Ennor, and other unquestionable authorities, can be had, post fee, on application.

THE OLD GUNNISLAKE MINING COMPANY (LIMITED).

ALL APPLICATIONS FOR SHARES must be SENT IN on or before TUESDAY, the 21st Feb., for LONDON, and WEDNESDAY, the 22d Feb., for the COUNTRY, when the allotment will be proceeded with. Signed,
JEHU HITCHINS, Sec.

THE NATIONAL BOILER INSURANCE COMPANY (LIMITED).

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BRANCH OFFICE .. 22, ST. ANN'S SQUARE, MANCHESTER.
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The company are now issuing policies for insuring all kinds of steam-boilers on the most liberal terms.
A large reduction made on premiums in cases where the company's fusible safety-plug (as adopted in Her Majesty's Mint, and on the North London Railway, and many other large firms) is used.
Losses settled with promptitude. JOHN H. TILLY, Sec.

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With Analytical References and Copious Index, together with an Appendix containing Table B Joint-Stock Companies Act, 1856, and Rules in Chancery under Companies Act, 1862. By ANTHONY PULBROOK, Solicitor.

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SHOWING THEIR APPLICABILITY TO MINING AND OTHER COMMERCIAL PURPOSES.
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A Series of Seven Articles published in the MINING JOURNAL, under the name of "A Correspondent in Carnarvonshire."
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MR. HOPTON'S NEW WORK, entitled CONVERSATIONS ON MINES, &c., BETWEEN "A FATHER AND SON."

Thirteen plans on ventilation and working out coal, dialling, planning, and taking the dip and rise of the mine illustrated.
Near 900 copies are ordered in Wigan alone.
Address Mr. J. J. CAMPBELL, Cropper's-hill, St. Helen's; or the author, 73, Peter-street, St. Helen's.

BRITISH AND FOREIGN INVESTMENT.—

MR. THOMAS SPARGO, STOCK, SHARE, AND MINING BROKER, 224, and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION OF BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS of BRITISH and FOREIGN STOCK.
MR. SPARGO has for sale shares in English mines paying from 10 to 20 per cent. upon the present price, in bi-monthly and quarterly dividends, as also a number of shares in good progressive mines, some of which he with confidence specially recommends to the public as sound investments.
MR. SPARGO gives every information as to position and prospects of all mining undertakings, upon application, either personally or by letter, and is enabled, through his long experience, aided by his monthly visits to Cornwall, Devon, and Wales, to obtain the most reliable information as to the numerous mines in those districts. He will at all times give the best advice as to investment in mines, and, if necessary, inspect them himself; as in all cases he wishes to be guided by the intrinsic value of the property. Upon the receipt of 5s. he will furnish a selected list of dividend and progressive companies.
MR. SPARGO has published the following works, viz.:—

Statistics and Observations upon the Mines of Cornwall,	1859,	price 2s. 6d.
Ditto	ditto	1860, price 2s. 6d.
Ditto	ditto	1862, price 5s.
Ditto	ditto	1864, price 5s.

Physical, Geological, and Parish Map of Cornwall. Scale, three miles to an inch. Printed in three colours, showing distinctly the mining districts, the height of the hills, &c. Price 10s. 6d., on cloth and rollers.
Geological maps of the various mining districts, showing the boundary line of each mine, with the lodes, cross-courses, and elvan courses by which it is traversed. Price 2s. 6d. each.
A Model, or Relief, map of Cornwall (6 ft. 6 in. by 5 ft.), presenting the names of every town and village, as also every characteristic point of the county. Price £5 5s.
Dividends received, calls paid, and all orders promptly negociated.
Commission 1¼ per cent.
MR. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.
MR. SPARGO's Statistics for 1865 will soon be published.
Bankers: Bank of London, and the Metropolitan and Provincial Bank (Limited).

PUBLIC COMPANIES UNDER COMPANIES ACT, 1862.—

The CITY REGISTRATION AGENCY is at No. 8, ROYAL EXCHANGE, where all forms and books required under this Act may be obtained. Designs, specimens of seals, and share plates, can be seen at the same address.

PUBLIC COMPANIES UNDER COMPANIES ACT, 1862.—

The new form of account books, especially prepared for the above, may now be seen at the City Registration Agency, 8, Royal Exchange, where all forms and books required under this Act, as well as seals, share plates, &c., may be obtained.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the CORNUBIA TIN MINING COMPANY (LIMITED).—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 23d day of February inst., to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company to William Michell, Esq., the Registrar of the said Court at Truro.
Dated Registrar's Office, Truro, February 8, 1865.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the BULLER AND BASSET UNITED MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before the 18th day of February inst., to SEND IN THEIR NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company to William Michell, Esq., the Registrar of the said Court at Truro.
Dated Registrar's Office, Truro, February 8, 1865.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WORVAS DOWNS MINING COMPANY.—The Registrar of this Court has appointed the 27th day of February inst., at the Registrar's office, at Truro, to SETTLE the LIST of CONTRIBUTORIES of the ABOVE-NAMED COMPANY, now made out and deposited at the said office.
WILLIAM MICHELL, Registrar of the said Court.
Dated this 9th day of February, 1865.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the GOONZION MINING COMPANY.—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 4th day of February inst., presented to the Vice-Warden of the Stannaries, by Arthur May, a contributory of the said company, and that the said petition is directed to be heard before the Vice-Warden, at the sittings of the Court to be holden at the Prince's Hall, Truro, on Monday, the 20th day of February inst., at Twelve o'clock at noon.
Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioner, his solicitor, or agent, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., the secretary of the Vice-Warden, Truro.
Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same, from the petitioner or his solicitor, within 24 hours after requiring the same, on payment of the regulated charge per folio.
Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before Thursday, the 16th day of February inst., and notice thereof must at the same time be given to the petitioner, his solicitor, or agent.
JOHN RULE DANIELL, of Camborne (Solicitor of the Petitioner).
JOHN GILBERT CHILCOTT, of Truro (Agent of the said Solicitor).
Dated this 9th day of February, 1865.

In Chancery.

TO BE SOLD, pursuant to a Decree of the High Court of Chancery made in a Cause Brown *v.* Spittle, with the approbation of the Master of the Rolls, in four lots, by Mr. THOMAS RICHARDS, the person appointed by the Judge, at the Swan Hotel, Wolverhampton, Staffordshire, on Wednesday, the 22d day of February, 1865, at Five o'clock in the afternoon precisely, certain FREEHOLD, COPYHOLD, and LEASEHOLD ESTATES, being the ROSE HILL COLLIERY and the ROSE HILL BRICKYARD, with several DWELLING HOUSES thereon or adjacent thereto, situate at Rose Hill, in the township of Willenhall, in the county of Stafford, and now in the occupation of Messrs. Brown and Spittle, and their undertenants.
Particulars whereof, with plans and conditions annexed, may be had of E. B. DIMMACK, Esq., Parkfield Works, Wolverhampton; Mr. CHARLES GALLIMORE BROWN, Bilston; Mr. NEEDHAM, 1, New Inn, Strand, London; Mr. E. M. ELDERTON, 3, Pump-court, Temple, London; at the Swan Hotel; and of the Auctioneer, at Wolverhampton; and the surface of the premises, and the plant and stock, may be viewed on application to Mr. WILLIAM FELLOWS, manager at the works.

GURLYN MINE, ST. ERTH, CORNWALL.
VALUABLE MACHINERY AND MATERIALS FOR SALE.

MR. R. H. CADE is instructed to SELL, BY AUCTION, on Tuesday, the 21st day of February inst., at Eleven o'clock in the forenoon, at GURLYN MINE, in the parish of St. Erth, the following MACHINERY and MATERIALS:—
A 60 in. cylinder PUMPING ENGINE, nearly new, 9 ft. stroke, equal beam, with TWO BOILERS 10 tons each.
50 fms. 16 in. 9 ft. pumps, 1 16 in. plunger pole, 1 16 in. H piece, 1 16 in. top door, 1 16 in. windbore, 1 17 in. pole case, 1 15 in. working barrel, 1 15 in. doorpiece, 1 15 in. windbore, 46 fms. 11 in. 9 ft. pumps, 2 11 in. H pieces, 2 11 in. doorpieces, 2 12 in. pole cases, 2 11 in. windbores, 2 12 in. 10 ft. poles, 5 13 in. 9 ft. pumps, 1 12 in. working, 1 12 in. doorpiece, 1 12 in. windbore, 2 10 in. workings, 1 10 in. doorpiece, 1 10 in. windbore, flange bolts and burs, strapping plates, rod pins, 40 fms. 7 and 8 in. wood rods, staples and glands, wood balance-bob, shears and sheaves, double winch, 100 fms. capstan chain, 2 cisterns, wood sheds, 150 fms. 2½ in. best round iron flat-rods, lifting jack, blocks, 100 2 ft. sheaves, 40 fms. 14 in. pitch pine rods complete, bucket rods, buckets, &c.; iron balance-bob, connection rods, &c., complete; capstan and shears, 120 fms. capstan rope, 300 fms. ladders, several lots of timber (almost new), 4 horse whims (10 ft. cages), shaft tackle, chain and kibbles complete, 2 40 in. smiths' bellows, 2 anvils, sundry smiths' tools, screw plates and taps, from ⅝ in. to 2 in.; miners' tools, carpenters' house, bench, &c.; smiths' shop, &c.
The machinery and materials will be found to be of the best description, and in excellent working order.
The mine is situated about four miles from Hayle and Marazion.
For further particulars apply to the Auctioneer, Meneage-street, Helston.
Dated February 2, 1865.

VALUABLE BEDS OF COAL AND IRONSTONE, IN LIVERSEDGE, IN THE PARISH OF BIRSTAL, IN THE COUNTY OF YORK.

MESSRS. HARDWICKS AND BEST WILL SELL, BY AUCTION (unless previously disposed of private contract, of which due notice will be given), at the Talbot Hotel, in Bradford, on Thursday, the 23d day of February, 1865, at Six o'clock in the evening for Seven punctually, subject to such conditions as will be then produced and read,
All the supposed BEDS or SEAMS of COAL and IRONSTONE still ungotten, viz.:—The Lousy Bed, Stone Coal, the Low Moor Black Bed and Ironstone, and the Better Bed, with all others there may be lying under Bay Farm, in Liversedge, in the county of York, which farm contains by admeasurement 22 A. 2 R. 16 P. or thereabouts.
The purchaser will have the option of re-opening the shaft, from which two other beds of coal—viz., the Mucky Bed and the Blocken Bed—have been already got.
The above beds run through an extensive surrounding mineral district, principally unsold, and an opening is thus afforded for commencing a large undertaking.
For further particulars apply to Mr. J. D. BUTLER, surveyor, Cleckheaton; or at our offices. TAYLOR, JEFFERY, AND LITTLE, Solicitors
February 8, 1865. 5, Piccadilly, Bradford.

THREE LOCOMOTIVE ENGINES (one new in 1862) CONTRACTORS' PLANT AND IMPLEMENTS, PLAISTOW.

MESSRS. FULLER AND HORSEY are instructed to SELL BY AUCTION, on Tuesday, February 28, 1865, at Twelve precisely, at the works, Plaistow, THREE LOCOMOTIVE ENGINES and CONTRACTORS' PLANT and IMPLEMENTS used in the construction of the Northern Outfall Sewer, including—
ONE TANK LOCOMOTIVE, by Manning and Wardle, Leeds, with six wheels coupled, 3 ft. 3 in. diameter, 11 in. cylinder (new in 1862, and but little used).
TWO TANK LOCOMOTIVES, by G. England and Co., 10 and 12 in. cylinders.
An England's traversing jack, 3 forges, quantity of pickaxes, pumps and various utensils, 4 carts, useful iron, wheel hoops, bolt iron, fence posts, quantity of wagons, timber erections of temporary workshops and stores, blacksmiths' shop, stables, &c. Also, 20 sets new 3 ft. 6 in. wheels (Owen's patent), made by the Rotherham Foundry Co.; 40 new axles, to suit 5 ft. 3 in. gauge; 80 Owen's patent solid new tyres, by the Rotherham Foundry Co., to fit 3 ft. and 3 ft. 6 in. wheels.
May be viewed the day preceding and morning of sale, when catalogues may be had on the premises, and of Messrs. FULLER and HORSEY, 13, Billiter-street, E.C.

CONTRACTORS' PLANT AND IMPLEMENTS, BARKING CREEK.

MESSRS. FULLER AND HORSEY are instructed to SELL, BY AUCTION, on Wednesday, March 1, at Twelve precisely, at the Northern Outfall Works, Barking Creek, CONTRACTORS' PLANT and IMPLEMENTS used in the construction of the Northern Level Sewer, comprising—
SIX HUNDRED TONS PERMANENT and TEMPORARY RAILS, and TEN THOUSAND SLEEPERS.
TWO HUNDRED capital EARTH WAGONS, side and end tips.
SIXTY-SIX IRON EARTH WAGONS.
FIFTY-SIX BRICK TRUCKS, TWENTY large SPRING TRUCKS.
FIVE IRON CONCRETE WAGONS,
Concrete and pug mills, 100 centres, 5 portable offices, the temporary erections of sheds, cottages, storehouse, and stables.
A 12 horse power HORIZONTAL STEAM ENGINE, egg-end BOILER, PAIR of 4 ft. 6 in. horizontal French burr stones, 10 wrought-iron gates, 13 pairs wheels and axles, quantity of wrought, cast, and scrap iron, granite and York stone, large quantity of timber, navvy barrows, and a variety of stores and utensils.
N.B.—Barges can load alongside.
A steam-boat will leave the Blackwall pier for Barking Creek, calling at North Woolwich, on the day of sale, and returning in the afternoon, for the accommodation of intending purchasers, at times that will be notified in the catalogue.
May be viewed Monday and Tuesday preceding and morning of sale, when catalogues may be had on the premises, and of Messrs. FULLER and HORSEY, 13, Billiter-street.

TO CAPITALISTS AND SLATE MERCHANTS.

MR. T. JARMAN has to OFFER FOR SALE SHARES in a FIRST-CLASS SLATE QUARRY, making good returns of slate, of large size and best quality. Having a special report on the quarry, he strongly recommends these shares to merchants, to secure an early and constant supply of slate, and avoid the annoyance of a two years' stem (as at present at the Bangor Quarries), and also to share in the enormous profits obtained in the quarrying of slate [see T. C. Smith's work, price 1s., office of the MINING JOURNAL, London].
For copies of report, and particulars, address Mr. JARMAN, estate agent and quarry inspector, Emsworth, Hants.

FOR SALE, the RIGHT to the PATENT of a VALUABLE IMPROVEMENT in VALVES and BUCKETS for PUMPS, and in VALVES or COCKS for OTHER USES.—For particulars, apply to Mr. W. T. RAWLE, patent and mining agent, 39, Budge-street, Bristol.

LEAD MINES, ENGINES, BOILERS, PITWORK, WINDMILL, CRUSHERS, AND OTHER MINING PLANT AND BUILDINGS FOR SALE.

MR. T. P. THOMAS has been instructed to offer FOR SALE, BY PUBLIC AUCTION, at Garraway's Coffee House, on Monday, the 6th day of March next, at Twelve o'clock noon, the mines known as the NEWTOWNARDS AND CONLIG LEAD MINES, together with all the PLANT and BUILDINGS thereon, which are to be taken at a valuation.
These mines are situated in the county of Down, Ireland, within two miles of the railway station at Newtownards, and about the same distance from the harbour at Bangor. They are held under leases from the Marquis of Londonderry and Robert Edward Ward, Esq., of Bangor Castle, respectively, and extend over very considerable tracts of country, large portions of which are yet unexplored. The workings are very extensive, and have yielded large quantities of ore, from which dividends have been paid to the present company amounting to over £26,000.
The mine is provided with TWO STEAM ENGINES, attached to one of which is a crusher, also a powerful windmill for crushing, suitable dwelling houses for agent and overseers, and a variety of plant, which is set forth in an inventory, a copy of which can be procured upon application to the auctioneer. The washing floors are in good order, and command an abundant supply of water.
The mine is at present being worked at and above the 120, above which bunches of ore of considerable magnitude have been wrought, and ore is still raised monthly to an extent until very lately sufficient to meet current expenses. To explore and develope the lode longitudinally, making the present mine a basis from which to start trial levels, very well deserves the expenditure of a moderate amount of capital.
The present company having no power to make calls upon the shareholders is the cause of the mine being disposed of, as the requisite trials cannot be prosecuted without the aid of further capital.
Full particulars can be obtained upon application to the Auctioneer; to Mr. H. B NOBLE, Douglas, Isle of Man; to Capt. W. H. ROWE, Newtownards, who will show the mines; or to MR. THOMAS THOMPSON, 12, Old Jewry Chambers, London.

THE DOLFRWYNOG AND HAVOD OWEN MINES.

MESSRS. GADSDEN AND ELLIS WILL SELL, BY AUCTION, at the Guildhall Coffee House, near the Guildhall, in the City of London, on Wednesday, March 15, 1865, at Twelve o'clock, the DOLFRWYNOG AND HAVOD OWEN MINES, in the parish of Llanfachreth, Merionethshire, six miles from Dolgelly, extending over about 326 acres, together with the costly MACHINERY and PLANT. The prospects of these mines are most favourable. Large quantities of copper ore have been raised, and ore containing a high percentage has been obtained. The assertions made by some of the most celebrated authorities of the day, that gold exists to a large extent, are it is believed fully borne out by the highly satisfactory results of adjoining mines are showing.
The mines are held on lease for 21 years, at rentals of £25 per annum each, or at a royalty of 1-15th, at lessor's option.
Particulars may be had at the hotels at Dolgelly; of Messrs. SUTTON and OMMANNEY, solicitors, 6, Basinghall-street; of WILLIAM BATTYE, Esq., 33, Great Winchester-street; at the Guildhall Coffee House; and of Messrs. GADSDEN and ELLIS, No, 18, Old Broad-street, London, E.C.

The VALUABLE MINING RIGHTS extending throughout the LANDS known by the name of NANT-Y-IAGO, in the parish of Llangurig, Montgomeryshire, containing 353 A. 2 R. 14 P., successfully worked for lead and blende ores, together with all the PLANT and MATERIALS.

MESSRS. GADSDEN AND ELLIS WILL SELL, BY AUCTION, at the Guildhall Coffee House, near the Guildhall, in the City of London, on Wednesday, March 15, 1865, at Twelve o'clock; the above promising MINE, held from Sir Watkin Williams Wynn, Bart., for 21 years, from December, 1859, at a royalty of 1-16th.
Particulars may be had of Messrs. BARNES and BERNARD, solicitors, 2, Great Winchester-street, City; of Captain JAMES ROACH, at the mine, and at Llanidloes; at the Guildhall Coffee House; and of Messrs. GADSDEN and ELLIS, No. 18, Old Broad-street.

WHEAL ANNA, ST. HILARY, NEAR MARAZION, CORNWALL.

FOR SALE, BY PRIVATE CONTRACT, the WHEAL ANNA MINE, with the MATERIALS thereon, situate in the parish of St. Hilary, near Marazion, Cornwall, adjoining the Great Wheal Prosper Mines.
The materials consist of a 70 in. cylinder PUMPING ENGINE, with THREE BOILERS complete.
36 in. cylinder PUMPING ENGINE, with ONE BOILER.
32 in. DOUBLE STAMPING ENGINE, 9 ft. stroke, with ONE BOILER, and 36 heads of stamps.
22 in. WINDING ENGINE, with BOILER and cage.
Capstans, shears, balance-bobs, capstan rope, a large number of 17 in., 16 in., and 12 in. pumps, with windbores, doorpieces, H pieces, plunger poles, working barrels, rods, rod plates, caps, shaft roller, rod and flange bolts, rail iron, chain, ladders, whims, &c.; Brenton's calciner, with tin frames, trunks, buddles, &c.; smiths' and miners' tools, &c.
To view the same, apply to the agents, on the mine; and for further particulars to Mr. J. P. BENNETTS, Falmouth; or to Messrs. JOHN TAYLOR and SONS, 6, Queen-street-place, Upper Thames-street, London.—Nov. 1, 1864.

DEAN FOREST.

FOR SALE, an EXTENSIVE and VALUABLE HEMATITE IRON MINE, situated near CINDERFORD, in the FOREST OF DEAN. This mine is situated in the best part of the forest basin for richness and productiveness, the ores from which are known to yield in the smelting furnace upwards of 60 per cent. of iron, and which from its highly manufacturing properties is in great request, and always commands a ready sale in South Wales and Staffordshire. The South Wales Railway runs through the property, forming a convenient communication with the above district.—For all particulars, and to treat, apply to Mr. H. D. HOSKOLD, mining engineer, Cinderford, Gloucestershire.

HOLMBUSH MINES—SALE OF ENGINES, &c.

TO BE SOLD, BY PRIVATE CONTRACT, ONE 80 in. cylinder PUMPING ENGINE, 11 ft. stroke in cylinder, 9 ft. in shaft, air pump (brass lined), with THREE BOILERS about 12 tons each. ONE 18 in. WINDING ENGINE, 3½ ft. stroke, with cage, and 8 tons BOILER. ONE 16 in. WINDING ENGINE, with oscillating beam, cage, and BOILER 6 tons.—For further information, apply to Mr. WARD, 9, Broad-street-buildings, London; Capt. JOHNS, West Caradon Mine, Liskeard; or to Mr. THOMAS PRYOR, Claremont, Redruth.

LEICESTERSHIRE.

TO BE SOLD, the RIGHT of WORKING the COALS and OTHER MINERALS lying under a portion (being 47 A. 2 R. 35 P.) of IBSTOCK GRANGE ESTATE, in the above county.
The lands under which the coals and other minerals lie are within a short distance of Ibstock Colliery, comprise the same seams of coal, being five in number, ranging from 2 ft. 9 in. to 8 ft. in thickness, and are about the same depth from surface.
The district presents unmistakeable evidence of a coal field capable of being extensively and profitably worked.
Ibstock Grange is situate 13 miles from Leicester, 13 from Ashby-de-la-Zouch, 5 from Market Bosworth, and 1¼ from Bayworth station, on the Leicester and Burton branch of the Midland Railway.
For further particulars, and to treat for same, apply to Messrs. BURD and SONS, estate agents, Shrewsbury.

COALMASTERS AND CAPITALISTS.

TO BE DISPOSED OF, BY VALUATION, or as may be otherwise agreed upon, the LEASE and PLANT of a FIRST-CLASS COLLIERY in the STAFFORDSHIRE POTTERIES, which is partly developed, and has a good trading connection. The mines are extensive, consisting of the principal seams of the district, and vary in thickness from 4 to 13 ft. They are excellent house fire, potters', furnace, and forge coal. There are also valuable seams of ironstone on the estate. A railway runs through it close to the workings, and a canal within 400 yards of them. In addition to these advantages the colliery is within a short distance of earthenware manufactories, and for the erection of forges the site is most eligible.—For particulars, apply to Mr. TELLWRIGHT, Bucknall, Stoke-on-Trent.

MERIONETHSHIRE, NORTH WALES.

TO BE DISPOSED OF, a SLATE QUARRY PROPERTY, vein proved, and position commanding all advantages. Also, a VALUABLE GRANT, possessing a RICH SILVER-LEAD MINE, with other lodes, very favourable.—To treat for the same, apply to Mr. H. P. M. OWEN, C.E., Penrhyndendraeth, via Carnarvon.
Mr. OWEN has OTHER MINES and QUARRIES TO DISPOSE OF. Also, begs to offer his services to gentlemen in all inspections of native mineral, with practical reports thereon. Immediate attention given.

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place Laurence Pountney-hill Cannon-street E.C.

ENGINE AND BOILER FOR SALE.—A BOULTON AND WATT 40 horse power LOW PRESSURE BEAM ENGINE FOR SALE. Also, a CORNISH WROUGHT IRON BOILER, in capital repair, by Hill and Sons. The principal dimensions of the engine are 24 in. cylinder, 5 ft. stroke, 16 ft. fly-wheel. The boiler is 22 ft. long, 8 ft. diameter, with double tubes. The engine and boiler may be seen at work any day before the 31st of March. Can be delivered before the 30th April next on the ground, or the purchaser may make other arrangements for taking down engine after stopping working. Price for engine and boiler, £300.
For view, or other particulars, apply to Messrs. STANTON and SON, Stafford Mills, Stroud, Gloucestershire.

A GREAT DEAL of INFERIOR SPIEGELEISEN having been SOLD in ENGLAND, to the PREJUDICE of the GENUINE ARTICLE, I beg to OFFER BEST QUALITY of SPIEGEL IRON, ex steamer in Hull, at £6 10s. per ton. SECOND QUALITY, £5 5s. Also, PUDDLED STEEL in BARS, ordinary sizes, £13 per ton. Apply to JULIUS GOLDSTEIN, HAMBURG.
Engineers, also merchants and manufacturers in the metal trade, wishing to be represented in Hamburg, will please communicate.

NORTH OF ENGLAND MINING AND ENGINEERING OFFICES, MANCHESTER.

MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Progressive Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.
Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.
The Circular for January will contain special reports on Copper Hill, West Trevelyan, North Chiverton, and Frank Mills.
Bankers: National Provincial, Manchester; and the Alliance, Lothbury, London.

GOVERNMENT SECURITIES, JOINT-STOCK BANKS, RAILWAY DEBENTURES AND BONDS, COLONIAL SECURITIES, FOREIGN BONDS, AND BRITISH MINES.—MESSRS. TREDINNICK AND CO., of 78, LOMBARD STREET, LONDON, E.C., may be consulted confidentially as to the eligibility of all *bond fide* investments. A selected list forwarded on application.

NICHOLLS, WILLIAMS, AND CO., ENGINEERS,
BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the manufacture of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, WILLIAMS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, WILLIAMS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices. 116

ELFORD, WILLIAMS, AND CO.,
COPPER ORE WHARFINGERS,
METAL AND GENERAL COMMISSION AGENTS,
SWANSEA. 111

PATENT FLEXIBLE TUBING,
AND BRATTICE CLOTH FOR MINES,
MANUFACTURED BY
ELLIS LEVER,
PATENTEE,
WEST GORTON WORKS, MANCHESTER. 112

TAVISTOCK IRONWORKS AND STEEL ORDNANCE COMPANY (LIMITED).
(LATE GILL AND CO.)
ENGINEERS, IRON AND BRASS FOUNDERS,
MANUFACTURERS OF
STEAM ENGINES, BOILERS, AND MACHINERY OF ALL KINDS. CHAINS, SHOVELS, EDGE TOOLS, AND EVERY DESCRIPTION OF CAST AND HAMMERED IRON FOR MINING, MANUFACTURING, RAILWAY, OR AGRICULTURAL PURPOSES.
Machinery sent to all parts of the world.
Foreign mining companies supplied on liberal terms. 113

RAILWAY CARRIAGE COMPANY (LIMITED),
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER. 114

THE BEVERLEY IRON AND WAGON COMPANY (LIMITED).
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, WROUGHT and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED USES, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS of PORTABLE FARM RAILWAYS, TURNTABLES, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINISTS. MANUFACTURERS of FIELD, ROAD, and BARN IMPLEMENTS, PATENT LORRY, CART, and CARRIAGE WHEELS, with WOOD or IRON NAVES. REAPING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for HOME and FOREIGN RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c.
IRONWORKS, BEVERLEY, YORKSHIRE.
JAMES DEWHIRST, Sec. 115

THE BIRMINGHAM WAGON COMPANY (LIMITED)
MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.
EDMUND FOWLER, Sec.
OFFICES,—3, NEWHALL STREET, BIRMINGHAM.

Gun Cotton Manufactory.

MESSRS. THOMAS PRENTICE AND CO.,
GREAT EASTERN CHEMICAL WORKS, STOWMARKET, SUFFOLK.

This manufactory has been established for the purpose of preparing GUN COTTON, according to the Austrian process, and was opened on the 26th of January last, under the inspection of Baron Lenk. Messrs. Thomas Prentice and Co. are now able to SUPPLY GUN COTTON, in its most approved form, either for the purposes of engineering and mining, or for military and submarine explosion, and for the service of artillery, as a substitute for gunpowder.

The advantages of Baron Lenk's GUN COTTON are the following:—

FOR PURPOSES OF ARTILLERY.—The same initial velocity of the projectile can be obtained by a charge of gun cotton one-fourth of the weight of gunpowder. There is no smoke from the explosion of gun cotton; it does not foul the gun, nor heat it to the injurious degree of gunpowder. There is much smaller recoil of the gun. The same initial velocity of projectile is produced, with a shorter length of barrel. In projectiles of the nature of explosive shells it breaks the shell more equally into much more numerous pieces than gunpowder. When used in shells, one-third the weight of gun cotton produces double the explosive force of gunpowder.

FOR CIVIL ENGINEERING AND MINING.—In driving tunnels through hard rock a charge of gun cotton of given size exerts double the explosive force of gunpowder, thus a smaller number of holes is necessary. It may be so used as, in its explosion, to reduce the rock to much smaller pieces than gunpowder, and so facilitate its removal. As gun cotton produces no smoke, the work can proceed much more rapidly, and with less injury to the health of the miners. In working coal mines the advantages of bringing down much larger quantities of material with a given charge, and the absence of smoke in the explosion, enable a much greater quantity of work to be done in a given time at a given cost. The weight of gun cotton required to produce a given effect in mining is only one-sixth part of the weight of gunpowder. In blasting rock under water the wider range and greater force of a given charge is a great element in cheapening the cost of submarine work. The peculiar local action of gun cotton, to which the effects of gunpowder show no analogy, enables the engineer to destroy and remove submarine stones and rocks, without the preliminary delay and expense of boring chambers for the charge.

FOR MILITARY ENGINEERING.—The facility of transport is increased, the weight of gun cotton being one-sixth that of gunpowder. The peculiar localised action of gun cotton facilitates the destruction of bridges and palisades, and every obstacle. For submarine explosion, gun cotton has the advantage of a much wider range of destructive power than gunpowder. For the same purpose gun cotton, from its lightness, has the advantage of keeping afloat the water-tight case in which it is contained, while gunpowder sinks it to the bottom.

FOR NAVAL WARFARE.—In the batteries of ships, between decks, and in casemated forts, the absence of smoke facilitates continuous rapid firing. The absence of fouling and of heating are equally advantageous for naval as for military artillery.

GENERAL ADVANTAGES.—Time, damp, and exposure do not alter the qualities of the patent gun cotton. It has already been preserved 10 years without injury or decay. It can be transported through fire without danger, simply by being wetted, and when dried in the open air it becomes as good as before. In the case of a ship, or a fortress, or a city being on fire, this quality may be of the greatest value. It is much safer than gunpowder, owing to its being manufactured in the shape of rope of yarn. It cannot escape from its package, or be spilled by accident. The patent gun cotton is entirely free from the danger of spontaneous combustion, and secures that degree of safety and certainty which, at the time of the original invention, the gun cotton of Schönbein did not possess.

Messrs. THOMAS PRENTICE and Co. are now in a position to contract with the owners of mines, engineers, contractors, and governments for gun cotton prepared in the various forms required for their use. Mining charges will be supplied in the rope form, according to the diameters of bore required, and gun cotton match-line, as well as instructions for using it in mines, will be supplied with it.

The great advantage of gun cotton make its use in practice very much cheaper than its comparative price would appear to show; in blasting rock, for example, the rapidity and quantity of the work done, with a given expense of wages, &c., is largely in favour of gun cotton.

Messrs. THOMAS PRENTICE and Co. are also prepared to manufacture the gun cotton, and deliver it in the form of gun cartridges, adapted to every description of ammunition; all they require for this purpose being a drawing of the gun, gunpowder cartridges, and ammunition, with the specification of weights, sizes, and initial velocities.

Artillerists who prefer to manufacture their own cartridges may make special arrangements with the patentee through Messrs. PRENTICE and Co.

Stowmarket, March 10 1864. 117

No. 1 will be published on Saturday, the 18th inst.

THE EVENING EXCHANGE:
A Journal of the Money Market and City News. The only paper containing the Latest Prices of Stocks and Shares, also of the Corn, Cotton, Coal, Metal, Mining, and Produce Markets published on the same day. Price 12s. per quarter, 19s. 6d. free by post; single copy 2d. Post-office orders payable to G. L. Banks. A specimen number gratis this day.
Office, 93, London-wall, E.C. 118

TO THE HARDWARE TRADE.

RYLAND'S IRON TRADE CIRCULAR is now the leading journal of the trade. Supplied to subscribers only.

One year	£2	2	0
Half a year	1	1	0
Quarter of a year	0	10	6

Payable in advance.
Office for advertisements, Union-passage, Birmingham. 119

THE STOCKTON AND HARTLEPOOL MERCURY AND MIDDLESBOROUGH NEWS (published at Hartlepool) is eminently the organ of the Coal, Iron, and Iron Ship-building Trades in the extensive Mining and Maratime District of South Durham and Cleveland, with which it has been closely identified since its origin. The "Mercury" was for years the only newspaper published in South Durham and Cleveland" and is yet the only one published more than once a week. Advertisements to be forwarded to the publisher, Mr. JOHN H. BELL, Southgate, Hartlepool. 120

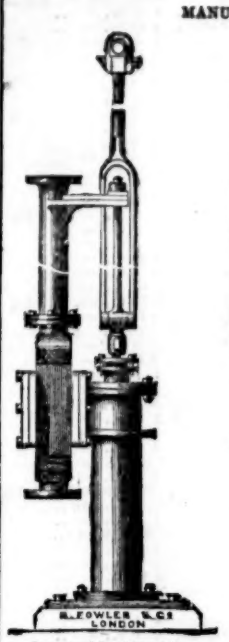
THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).
Published every Saturday, price 2d., or quarterly 2s. 2d.
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER,
Published every morning, price 1d.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland. 121

NEW MEDICAL GUIDE.

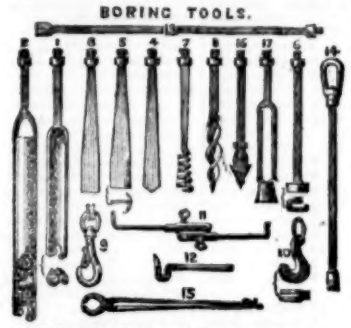
DR. SMITH, who has had twenty years' practical experience in the treatment of Debility, Spermatorrhœa, Disorders of the Nervous System, &c., has published A GUIDE (138 pages) for Self-Cure. Sent to any address on receipt of two stamps. Dr. SMITH may be consulted personally (or by letter) in all private and confidential cases.—Address, SMITH and Co., 8, Burton-crescent, Euston-road, London W.C. Consultations daily from Eleven to [illegible] 122

CLINTON AND OWENS (LATE B. FOWLER AND CO.),

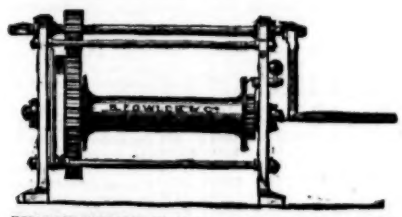
WHITEFRIARS STREET, FLEET STREET, LONDON,
HYDRAULIC AND GENERAL ENGINEERS,
MANUFACTURERS OF PUMPS OF EVERY DESCRIPTION FOR HAND, HORSE, STEAM, OR WATER POWER.



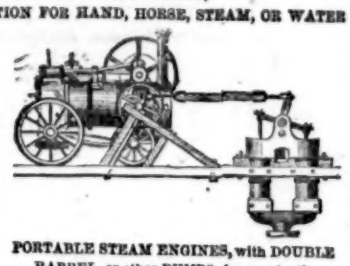
Improved Double-action PUMPS.



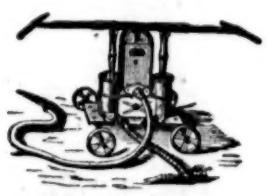
BORING TOOLS OF ALL DESCRIPTIONS, for Testing Ground and for Artesian Wells.

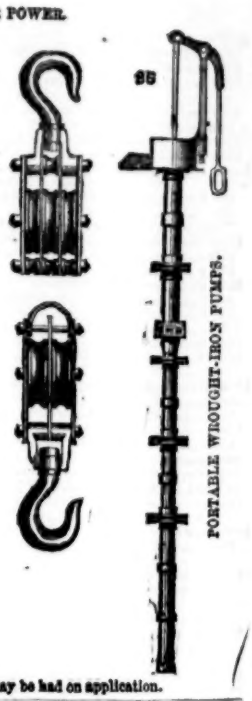


PULLEY BLOCKS, CRABS, and HOISTING TACKLE, of every description, and of superior manufacture.


PORTABLE STEAM ENGINES, with DOUBLE BARREL, or other PUMPS, for any depth, ON HIRE OR PURCHASE.

PORTABLE WROUGHT-IRON HAND PUMPS, of all sizes.


USEFUL DOUBLE BARREL PORTABLE FORCE PUMPS.



PORTABLE WROUGHT-IRON PUMPS.

PRICE LISTS, ESTIMATES, DRAWINGS, and FULL PARTICULARS of anything relating to work of classes noted above, may be had on application. 134

CLAYTON, SHUTTLEWORTH, AND CO.,
ENGINEERS,
MANUFACTURERS of PORTABLE and FIXED STEAM ENGINES, MACHINERY for PUMPING, HOISTING, GRINDING, SAWING, &c., ENGINES for STEAM CULTIVATION, SELF MOVING ENGINES for COMMON ROADS and AGRICULTURAL PURPOSES GENERALLY.
STAMP END WORKS, LINCOLN; and
78, LOMBARD STREET, LONDON.
ALSO AT
LOWENGASSE No. 44, LANDSTRASTE, VIENNA, and GEGENUBER DEM BAHNHOF, PESTH.
Descriptive, illustrated, and priced catalogues free per post.
SPECIAL DRAWINGS WHEN REQUIRED.
THE BEST STEAM THRASHING MACHINERY MADE. 123

FRANCIS'S SLACK WASHING MACHINE,
SIMPLE, and THOROUGHLY EFFICIENT, REQUIRES NO STEAM ENGINE. Will wash brace from the puddling-furnace. Price £25.—Apply to Mr. R. C. RAWLINS, Wynn Hall Colliery, Ruabon. 124

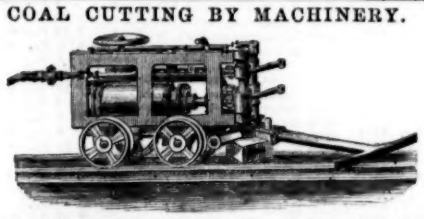
COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE. 125

COAL CUTTING BY MACHINERY.



MESSRS. RIDLEY AND CO. have, by recently PATENTED IMPROVEMENTS, COMPLETED their TRUNK COAL CUTTING MACHINE, WORKED by COMPRESSED AIR, and are NOW PREPARED to NEGOCIATE for the USE, and to SUPPLY MACHINES, which will be found to COMBINE SIMPLICITY of CONSTRUCTION with PORTABILITY and ECONOMY in WORKING. By the use of these machines a CONSIDERABLE SAVING of COAL is EFFECTED, and the COST of LABOUR MUCH REDUCED. Each machine will be guaranteed as to its capabilities, &c.

All applications to be made to Messrs. RIDLEY and Co., No. 11, South-street, Finsbury London, E.C.; or Mr. PERCY BANKART, agent, 9, Clement's-lane, E.C.

*** COLLIERY PROPRIETORS are CAUTIONED against PURCHASING or USING MACHINES, the construction of which will constitute an INFRINGEMENT of the ABOVE PATENT.

Swan Rope Works.

GARNOCK, BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL,
MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER, and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH. 126

First Class Silver Medal, Royal Polytechnic Society, Falmouth, 1864.

CREASE'S PNEUMATIC TUNNELLING ENGINE, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.

Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE Tavistock, Devon. 127

Prize Medal Awarded Great Exhibition, 1851, and International Exhibition, 1862.

PATENT SAFETY FUZE WORKS, TUCKINGMILL,
CORNWALL.—We beg respectfully to inform the public that since the decease of the late Mr. THOMAS DAVEY this firm has consisted of JOHN SOLOMON BICKFORD, GEORGE SMITH, FRANCIS PRYOR, SIMON DAVEY, and WILLIAM BICKFORD SMITH. It is requested that all letters may be addressed, and all cheques and drafts made payable to us, as
BICKFORD, SMITH, AND CO. 129

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE. 130

HYDRAULIC LIME AND ROMAN CEMENT,
MANUFACTURED by LLOYD JONES AND CO., HALKIN WORKS, HOLYWELL, FLINTSHIRE. The Halkin Hydraulic Lime is the same as used in the construction of the Liverpool Docks, Manchester, and various Waterworks, Collieries, and Mines throughout the country, being so long celebrated for its strong cementitious and connecting powers for masonry in water. Can be supplied by rail or water to any part of the kingdom, either in lump (loose) or ground, and in barrels or bags. The Limestone can be had in full cargoes, also their cement in barrels, which is of a very superior quality, and warranted pure. Orders to be accompanied by a banker's reference.—Apply at the Works, or to E. and W. AARON, agents, 66, South Johns-street, Liverpool. 131

ISAAC FRANCIS, NANT, WREXHAM, a dresser of 30 years experience, is OPEN to INSPECT ANY DRESSING PLACE on moderate terms Mr. FRANCIS can introduce PLANS of IMPROVEMENTS that will SAVE THIRTY PER CENT. COST in certain departments of any dressing floors. 132

ASSAYS AND ANALYSES.—MR. JOSEPH GREEN, for the past 14 years professional assayer to the Chester Goldsmiths' Company, UNDERTAKES the ASSAYING and ANALYSIS of EVERY DESCRIPTION of MINERAL.—Assay Office, Chester. 133

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.
Warehouse, 81, Upper Ground-street, London, S. 135

Prize Medals—International Exhibition, Class 1 and 2.

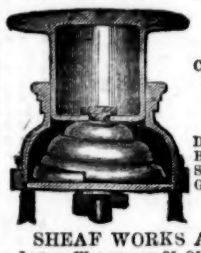
PATENT PLUMBAGO CRUCIBLES.—The CRUCIBLES manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY are the ONLY KIND for which a MEDAL has been AWARDED, and are now used exclusively by the English, Australian, and Indian Mints; the French, Russian, and other Continental Mints; the Royal Arsenals of Woolwich, Brest, and Toulon, &c.; and have been adopted by most of the large ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The GREAT SUPERIORITY of these melting pots consists in their capability of melting on an average 40 pourings of the most difficult metals, and a still greater number of those of an ordinary character, some of them having actually reached the EXTRAORDINARY NUMBER of 96 meltings. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other crucibles. In consequence of their great durability, the saving of waste is also very considerable.

The company have recently introduced CRUCIBLES SPECIALLY ADAPTED for the following purposes, viz.:—MALLEABLE IRON MELTING, the average working of which has proved to be about seven days; STEEL MELTING, which are found to save nearly 1½ ton of fuel to every ton of steel fused; and for ZINC MELTING, lasting much longer than the ordinary iron pots, and saving the great loss which arises from mixture with iron.

The Patent Plumbago Crucible Company likewise manufacture and import Clay Crucibles, Muffles, Portable Furnaces, &c., Stove Backs, all descriptions of fire-standing goods, and every requisite for the Assayer and Dentist.

For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea Works, London, S.W. 136

THOMAS TURTON AND SONS,
MANUFACTURERS OF

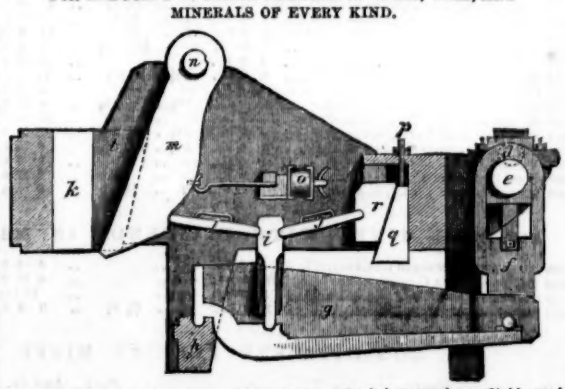


CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and
FORGINGS of EVERY DESCRIPTION.

DOUBLE SHEAR STEEL,	FILES MARKED
BLISTER STEEL,	T. TURTON,
SPRING STEEL,	EDGE TOOLS MARKED
GERMAN STEEL.	WM. GREAVES & SON

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.
SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.,
Where the largest stock in the world may be selected from. 137

BLAKE'S PATENT STONE BREAKER,
OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.



It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England.

The above section illustrates Blake's Stone Breaker, just as made the last five years, and is fully protected in every part by patents.

Extract from Specification:—A short but powerful vibration is imparted to one or both of the jaws by any convenient arrangement, and combination of powerful levers, worked by a crank or eccentric on the main shaft.

LEGAL PROCEEDINGS will be taken at once against any person or persons found making, using, or vending any machine, the construction of which will constitute an infringement on the above patent. Read extracts of testimonials:—

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for ft road metal, free from dust. Messrs. ORD and MADDISON, Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCESTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS

For circulars and testimonials, apply to—
H. R. MARSDEN, SOHO FOUNDRY,
MEADOW LANE, LEEDS.
Only maker in the United Kingdom. 138

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid
1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—		11 3 0	0 15 0	Dec. 1864
4000	Bedford United (copper), Tavistock†	2 6 8	—		13 11 6	0 2 6	Oct. 1864
1248	Boscaswell (tin, copper), St. Just	6 15 0	—		1 5 0	0 5 0	May, 1864
200	Botallack (tin, copper), St. Just	91 5 0	—		477 15 0	3 0 0	May, 1864
1000	Bronfloyd (lead), Cardigan [L. £15]	12 0 0	30		5 10 0	0 15 0	Jan. 1865
916	Cargoll (silver-lead), Newlyn	15 5 7	37	36 38	9 5 0	0 15 0	Nov. 1864
1000	Carn Brea (copper, tin), Illogan	15 0 0	—		280 10 0	2 0 0	June, 1864
2880	Clifford Amalgamated (cop.), Gwen.	30 0 0	31¼	31 32	33 11 0	0 12 6	Dec. 1864
12000	Copper Miners of England	25 0 0	—		7¼ per cent.		Half-yrly.
40000	Ditto ditto (stock)	100 0 0	—		1 per cent.		Half-yrly.
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—		14 18 0	1 0 0	Jan. 1865
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—		275 10 0	4 0 0	Jan. 1865
280	Derwent Mines (sil.-lead), Durham	300 0 0	—		152 0 0	5 0 0	June, 1864
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	—	575 585	953 0 0	10 0 0	Jan. 1865
358	Dolcoath (copper, tin), Camborne*	128 17 6	—		781 10 0	6 0 0	Dec. 1864
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	37	30 32½	126 0 0	1 0 0	Nov. 1864
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	13⅞	13½ 14½	12 12 0	0 10 0	Jan. 1865
800	East Darren (lead), Cardiganshire*	32 0 0	—		103 10 0	2 0 0	Feb. 1865
128	East Pool (tin, copper), Pool, Illogan	24 5 0	—		369 10 0	4 0 0	June, 1864
5000	East Rosewarne (cop., tin), Gwinear	2 15 0	—		0 4 6	0 2 0	Feb. 1865
1906	East Wheal Lovell (tin), Wendron	2 13 6	13½	12½ 13	1 10 0	0 16 0	May, 1864
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—		65 0 0	1 0 0	Jan. 1865
5000	Frank Mills (lead), Christow	3 18 6	6¾	6¼ 6¼	2 0 6	0 6 0	Feb. 1865
12400	Great Laxey (lead), Isle of Man [L.]	4 0 0	19	17¼ 18	1 10 0	0 10 0	Dec. 1864
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	34	33 34	5 7 0	0 15 0	Dec. 1864
119	Great Work (tin), Germoe	100 0 0	—		15 0 0	5 0 0	Aug. 1864
1024	Herodsfoot (ld.), near Liskeard [S.E.]	8 10 0	—		31 10 0	1 15 0	Feb. 1865
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	—		430 10 0	2 0 0	Dec. 1864
2000	Maes-y-Safn (lead) [L]	20 0 0	—		1 0 0	1 0 0	Oct. 1864
9000	Marke Valley (copper), Caradon	4 10 6	5⅛	5 5⅛	2 18 0	0 2 6	Jan. 1865
3000	Minera Boundary (lead), Wrexham [L.]	1 0 0	—		0 4 0	0 2 0	Nov. 1864
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	—		162 18 0	7 0 0	Nov. 1864
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	31¼		16 19 7	0 12 3	Jan. 1864
40000	Mwyndy (iron ore) [L. £4] [S.E.]	2 10 0	—		0 4 0	0 2 0	April, 1864
250	Nanty Mines (lead), Montgomery	20 0 0	—		7 0 0	1 0 0	June, 1864
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	—	1⅜ 2	0 11 0	0 1 6	Oct. 1864
5936	North Treskerby (copper), St. Agnes	1 9 0	2⅛	1⅞ 2⅛	0 13 0	0 2 6	Feb. 1864
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—		135 0 0	12 10 0	Jan. 1865
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	33	32 34	75 5 0	1 0 0	Nov. 1864
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	—		467 10 0	8 0 0	Jan. 1865
4000	St. Day United (tin), Redruth	14 0 0	—		0 5 0	0 5 0	Mar. 1864
940	St. Ives Consols (tin), St. Ives	8 0 0	—		490 10 0	0 10 0	May, 1864
6000	Tincroft (cop. tin), Pool, Illogan [S.E.]	9 0 0	15⅛	15 16	16 1 0	0 10 0	Dec. 1864
1600	Torbay Hematite Iron [L. £8]	6 7 6	—		0 6 0	0 6 0	Nov. 1864
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—		26 3 0	0 5 0	Jan. 1865
3000	W. Chiverton, (ld.), Perranzabuloe [S.E.]	—	67⅛	63 66	3 15 0	0 15 0	Nov. 1864
256	West Damsel (copper), Gwennap	38 10 0	—		53 10 0	1 0 0	Nov. 1864
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	210	200 210	421 0 0	4 0 0	Dec. 1864
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	107½	100 105	606 10 0	2 0 0	Feb. 1865
512	Wheal Jane (silver-lead), Kea	3 10 0	—	7 9	15 0 0	0 10 0	Aug. 1864
4295	Wheal Kitty (tin), St. Agnes	5 4 6	—		2 6 6	0 3 0	Feb. 1865
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	2 0 6	—		10 2 6	0 7 6	July, 1864
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]	8 0 0	—		59 7 6	0 10 0	Dec. 1864
100	Wheal Mary (tin), Lelant	36 2 6	—		288 5 0	4 0 0	Mar. 1864
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—		343 3 0	5 0 0	May, 1864
396	Wheal Seton (tin, copper), Camborne	58 10 0	200	197½ 202½	187 15 0	4 0 0	Dec. 1864
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	19	19 20	50 17 6	0 12 6	Dec. 1864
7000	Wicklow (copper) [L.], Wicklow	2 10 0	—		14 17 0	0 6 0	Oct. 1864

[* Dividends paid every two months. † Dividends paid every three months.]

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid
240	Boscean (tin), St. Just	20 10 0	—		36 10 0	1 0 0	Mar. 1862
3000	Chiverton (lead), Perranzabuloe [S.E.]	6 0 0	6⅛	6	—	—	—
256	Condurrow (cop., tin), Camborne	76 10 0	45	45 50	85 0 0	2 0 0	June, 1857
2450	Cook's Kitchen (copper), Illogan	18 5 9	9	8½ 9½	1 7 0	0 7 0	May, 1862
1024	Copper Hill (copper), Redruth	12 0 0	5		2 7 6	—	Sept. 1862
1055	Craddock Moor (copper), St. Cleer	8 0 0	—		7 12 0	0 4 0	July, 1862
4076	Devon and Cornwall (cop.), Tavistock	6 6 3	—		0 10 0	0 2 6	Feb. 1859
12800	Drake Walls (tin, copper), Calstock	2 1 0	⅝		0 18 0	0 1 6	May, 1863
3000	Dyfngwm (lead), Wales	12 6 6	—		0 17 6	0 2 6	Jan. 1863
940	Fowey Consols (copper), Tywardreath	4 0 0	—		41 9 3	0 2 6	June, 1860
6000	Great South Tolgus (copper), Redruth	0 14 6	2⅞	2¼ 2¼	7 18 6	0 5 0	Dec. 1861
1798	Great Wheal Fortune (tin), Breage	19 12 0	6	4 5	5 15 0	0 10 0	Nov. 1863
10240	Gunnislake (Clitters' Adit) (copper)	0 2 0	—		0 3 0	0 1 6	Mar. 1862
160	Levant (copper, tin), St. Just	2 10 0	—		1091 0 0	5 0 0	May, 1860
640	Mount Pleasant (lead), Mold	4 0 0	—		18 18 1	0 7 6	Aug. 1862
5000	Orsedd (lead), Flintshire	0 0 8	—		0 10 4	0 0 8	Mar. 1862
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	—		36 19 0	0 2 6	Mar. 1863
1772	Polberro (tin), St. Agnes	15 0 0	—		7 19 6	0 10 0	Nov. 1863
512	Polbreen (tin), St. Agnes	8 0 0	—		1 0 0	1 0 0	July, 1863
6000	Roswall Hill and Ransom United	3 1 0	—		0 10 0	0 1 6	June, 1863
5000	South Exmouth (lead), Christow	1 14 0	—		0 5 0	0 5 0	Dec. 1862
512	South Tolgus (cop.), Redruth	8 0 0	—	2½	74 10 0	1 0 0	May, 1863
496	S. Wh. Frances (cop.), Illogan [S.E.]	18 18 9	26	23 25	370 18 6	1 0 0	Nov. 1863
280	Spearne Moor (tin, copper), St. Just	32 17 9	—	30	9 15 0	1 0 0	June, 1862
572	Treiyon Consols (tin), St. Ives	14 10 0	—		7 0 0	0 10 0	Sept. 1860
1000	Trumpet Consols (tin), near Helston	11 10 0	—		11 0 0	2 0 0	Mar. 1862
12000	Twelve Apostles Amal. (ld.), Wrexham	1 0 0	—		—	—	—
4200	Vigra and Clogau (copper) [L. £5]	5 0 0	—		6 2 6	1 10 0	Mar. 1864
1024	Wendron Consols (tin), Wendron	20 13 10	—		8 15 0	1 0 0	Jan. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0	—		14 10 0	3 0 0	June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]	9 0 0	8¼	7½ 8¼	101 1 3	0 10 0	Oct. 1862
1000	Wheal Basset and Grylls (tin)	7 0 0	—		3 0 0	0 10 0	Oct. 1863
1024	Wheal Friendship (copper), Devon	20 0 0	—		295 10 0	5 0 0	Feb. 1861
896	Wheal Margaret (tin), Uny Lelant	11 17 6	—	6 7	76 5 0	1 0 0	May, 1863
2044	Wheal Tremayne (tin), Gwinear	6 11 3	—		6 1 3	0 5 0	Nov. 1863
6400	West Fowey Consols (tin and copper)	7 10 0	—		0 19 0	0 3 0	May, 1862

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid
20000	Australian (cop.), S. Australia [S.E.]	7 7 6	—		0 1 0	0 1 0	Dec. 1863
2464	Burra Burra (cop.), South Australia	5 0 0	—		320 0 0	5 0 0	Sept. 1864
6000	Central American (silver) [L.]	5 0 0	—		4 6 8	0 14 10	Dec. 1863
15000	Cape Copper Mining [L. £10] [S.E.]	7 0 0	11¾	11¼ 11¾	0 15 0	0 5 0	Sept. 1864
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	31	27 29	101 0 0	1 0 0	Jan. 1865
100000	Don Pedro No. Del Rey [L. £1] [S.E.]	0 12 6	⅛	½ ⅝	0 0 9	0 0 9	Dec. 1863
70000	English and Australian	5 0 0	—		1 12 0	0 2 0	Aug. 1864
15000	East Indian Coal, Calcutta [L.]	10 0 0	—		7½ per cent.	—	Yearly.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	3¾	3¼ 3¾	0 14 4	0 3 0	June, 1864
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	24	22 24	21 10 0	1 0 0	June, 1864
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	1	¾ 1	0 12 0	0 1 0	June, 1864
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0	6	5 6	10 6 2	0 5 0	Jan. 1865
10000	Lusitanian (Portugal) [S.E.]	2 0 0	—	1¼ 1¾	1 4 0	0 3 0	Jan. 1865
9275	New Wildberg (copper)	2 0 0	—		0 10 0	0 10 0	Aug. 1864
50000	Panulcillo (copper) [L. £4] [S.E.]	3 0 0	4¾	4 4½	7½ per cent.	—	Yearly.
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	—		2 3 0	0 16 0	Dec. 1864
97500	Port Phillip (gold), Clunes [S.E.]	1 0 0	1⅜	1¼ 1⅜	0 12 6	0 1 0	July, 1864
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	35	33 35	63 15 0	2 10 0	June, 1864
43174	United Mexican (sil.), Mexico [S.E.]	28 5 0	5¼	4¾ 5¼	2 19 0	0 5 0	Sept. 1864
10000	Vancouver (coal) [L. £10]	5 0 0	5½	4½ 5½	0 15 0	0 5 0	Nov. 1864
50000	Victoria (London) Mining Co. [L.]	1 0 0	—		0 7 0	0 5 3	Jan. 1865
20000	West Canada Mining Company [L.]	1 0 0	—		0 17 0	0 5 0	Dec. 1864
45000	Yudanamutana (cop.), S.A. [L.] [S.E.]	3 0 0	2	1¾ 2	0 5 0	0 5 0	Aug. 1863

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last paid
10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	—		4 5 0	0 15 0	Nov. 1853
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	—		6 18 0	0 10 0	Nov. 1862
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	5 0 0	—		15 per cent.		May, 1859
103815	Mariquita and New Granada [S.E.]	1 0 0	¾	⅝ ¾	0 9 6	0 1 6	July, 1859

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos (lead), Spain [L. £2]	1 0 0	1¾	1¼ 1¼	Sept. 1864
100000	Anglo-Brazilian (gold) [L. £1] [S.E.]	0 5 0	⅜	⅛ ⅜	Dec. 1863
20000	Beariz Tin Streaming Company [L. £1]	0 17 6	—		Oct. 1863
25000	Capula (silver), Mexico [L. £2] [S.E.]	1 0 0	⅜	⅛ ⅜	Feb. 1864
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		Jan. 1859
10000	Copiapo Smelting [L.], Chili	10 0 0	—		Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	⅛ ⅜	Fully paid.
50000	East del Rey (gold), Brazil [L. £3] [S.E.]	2 0 0	1⅛	¾ 1	Feb. 1865
8000	English and Canadian Mining Company [L.]	5 0 0	—		Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—		Fully paid.
50000	Frontino and Bolivia (gold), New Granada [L. £2] [S.E.]	0 15 0	—		Oct. 1864
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	—		June, 1862
24000	Hindostan (copper), Bengal [L. £5]	3 0 0	—		Feb. 1863
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		Fully paid.
10000	Karbitz Colliery Company [L.]	1 0 0	—		Fully paid.
180000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—		Fully paid.
00000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	1	¾ 1	Fully paid.
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	—		Nov. 1862
10000	Otea (copper) New Zealand [L. £2]	0 15 0	—		Sept. 1864
15000	Pachuca Silver Mining Company, Mexico [L. £1]	1 0 0	—		June, 1863
6000	Peel River Land and Mineral [Limited]	100 0 0	—		Stock.
23000	Quebrada (copper), Venezuela [L. £10]	6 10 0	—		Sept. 1864
50000	Rossa Grande (gold), Brazil [L. £1] [S.E.]	0 5 0	—		April, 1864
10000	San Roque (lead), Spain	5 0 0	—		Fully paid.
60000	Santa Barbara (gold), Brazil [L. £1]	0 15 0	⅝	⅝ ¾	Sept. 1864
120000	Scottish Australian Mining Company [L. £1]	0 17 6	—		Feb. 1864
15000	South Europe Mining Company, Spain [L. £5]	5 0 0	—		Fully paid.
12000	Teplitz Colliery Co., Bohemia [L. £5]	3 0 0	—		June, 1863
5000	Valgodemard Mining Company [L. £20]	10 0 0	—		Oct. 1864
50000	Vallanzasca (gold), Italy [L. £1] [S.E.]	0 10 0	2	1¾ 2¼	Oct. 1864
45000	Victor Emanuel (copper), Italy [L.]	1 0 0	—		Fully paid.
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		Oct. 1862
12000	Wheal Ellen (copper), South Australia [L.]	5 0 0	—		Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	¾	½ ¾	Fully paid.
75000	Yorke Peninsula, South Australia [L. £1]	1 0 0	⅝	½ ⅝	Fully paid.

PROGRESSIVE MINES.

Shares	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
700	Aberdovey (sil.-lead), Merio.	4 10 0	—		Nov. 1864
1000	Alt-y-Crib (lead) [L. £5]	4 12 6	—		July, 1864
6000	Bagtor (tin) [L.]	2 0 0	—		Fully paid.
4000	Bedford Cons. (cop.), Tavistk.	2 10 0	—		Nov. 1864
3200	Bedol Aur (lead), Holywell	0 14 0	—		Dec. 1864
500	Billins (lead)	30 0 0	—		Fully paid.
6000	Boscawen (tin), Kenwyn	2 15 0	—		Jan. 1865
5000	Bottle Hill (tin) Plympton	1 8 6	5s.	⅛ ¼	May, 1864
30000	Bromlow (ld.), Minsterley, Salop	1 0 0	—		Fully paid.
200	Brynford Hall (lead), Flint	30 0 0	—		Aug. 1863
500	Bryn Gwiog (lead), Flint	9 0 0	19		June, 1864
1832	Bryntail (lead), Llanidloes	8 15 6	—		Dec. 1864
915	Calvadnack (tin), Wendron	26 8 6	—		Jan. 1865
1000	Camborne Consols (copper)	18 10 0	—		Feb. 1864
4600	Camborne Vean & Wh. Francis	10 8 4	—	1 1⅛	Oct. 1864
75000	Cambrian Consolid. (gd.) [L. £2]	1 0 0	—		Aug. 1862
8000	Cape Cornwall (cop.), [L. £2 10s.]	1 5 0	—		Dec. 1864
12000	Caradon & Phœnix Cons. [L. £1]	0 10 0	—		
914	Caradon Cons. (cop.), St. Cleer	29 6 6	—		Sept. 1864
10000	Caradon Vale (copper)	—	—		
6000	Carn Camborne (cop.), Cambn.	1 13 0	23s.	1 1⅛	Jan. 1865
2048	Carnyorth (tin), St. Just	4 15 0	—		Dec. 1864
20000	Carysfort [3200 £2⅛ pd., 16800 £1 pd.]		⅛		
10000	Castleward, Ireland [L.]	1 0 0	—		Fully paid
2500	Cefn Cilcen (ld.), Flint [L. £5]	2 10 0	—		Nov. 1864
800	Cefn Cwm Brwyno (lead)	4 0 0	—		Sept. 1864
2500	Central Minera (lead) [L. £5]	2 14 0	3		Jan. 1865
3000	Chiverton Moor (lead)	3 0 0	—		Oct. 1863
4000	Clara Unit., Ponterwyd [L. £3]	2 2 0	—		Jan. 1864
3072	Cleer's Hill (tin), St. Stephen's	0 1 4	—	⅜	July, 1864
5000	Cleveland (iron), [L. £20]	8 0 0	—		Jan. 1865
787	Clijah & Wentworth (tin, cp.)	33 10 0	—		Aug. 1864
3000	Clowance Wood (tin) [L. £5]	3 0 0	—		Oct. 1864
16000	Coolartra & Bond [L.] [5300 £1 pd., 10700 16s. pd.]			⅞ 1⅛	Feb. 1865
50000	Connorree (cop., sulph.) [L.]	1 0 0	25s.		Fully paid.
6000	Cornish Clay and Tin [L.]	1 0 0	—		Fully paid.
12000	Cornubia (tin) [L. £3] [4000 30s. pd., 8000 15s. pd.]				
861	Crane (copper), Camborne	25 7 0	—		Oct. 1864
30000	Crenver and Wh. Abraham [L.]	2 15 0	—		Oct. 1864
12000	Crelake (cop.), Tavistock	2 13 0	—		April, 1864
2500	Crowan Consols (cop.), Crowan	5 0 0	—		Oct. 1864
1428	Crowlwm (lead), Llanidloes	1 11 0	—		Dec. 1864
6000	Cuddra (cop., tin), St. Austell	4 5 0	—		July, 1864
10000	Cwmsymlog (sil.-ld.), [L. £5]	2 0 0	—		May, 1864
85000	Dale (lead), North Stafford	1 0 0	—		Fully paid.
1000	Darren (lead) [L.], Cardigan	7 4 0	—		Nov. 1864
672	Ding Dong (tin), Gulval	44 10 6	—		Dec. 1863
20000	Dolfrwynog (gold) [L. £1]	0 15 0	—		June, 1864
1000	Eaglebrook (lead) [L. £20]	17 9 0	—		Aug. 1864
1000	East Basset and Grylls (tin)	2 7 6	—		Aug. 1864
6000	E. Bottle Hill (tin), Plympton	0 4 6	—		Aug. 1864
50000	East Cambrian (gold) [L. £1]	0 15 0	—		Feb. 1864
6000	East Carn Brea (cop.) Redruth	3 15 0	6½	6⅛ 6⅜	Feb. 1863
2000	East Chiverton (lead)	2 18 0	¾		Nov. 1864
50000	E. Clogau (gold), Merio. [L. £1]	0 6 0	—		Mar. 1864
2048	E. Falmouth (s.-ld.), Kenwyn	5 0 6	—		April, 1864
6000	E. Grenville (cop.), Camborne	2 12 0	3⅛	3⅛ 3⅜	Feb. 1865
6000	E. Gt. Work (tin), Breage [L. £5]	3 10 0	—		Oct. 1864
4000	E. Gunnislake & S. Bedfd. (cop.)	7 19 6	¾	⅛ ¾	Sept. 1864
6145	East Jane (sil.-ld.), Cardinham	2 14 0	—		Dec. 1864
6000	East Laxey (lead) [L. £3]	2 0 0	2⅛	2 2⅛	July, 1864
1024	E. Margaret (tin), Uny Lelant	21 15 0	—		Nov. 1864
8000	E. Polberro (tin) [L. £1] [4000 £1 pd. 4000 12s. 6d. pd.]				Nov. 1864
3986	E. Providence (tin), Uny Lel.	3 18 3	2		Dec. 1864
6000	East Snaefell (lead) [L. £3]	1 10 0	—		
5610	East Seton (cop.), Camborne	0 10 0	—		Dec. 1863
256	East Tolgus (copper), Redruth	90 0 0	—		Nov. 1864
1024	E. Treskerby (cop.), Redruth	10 13 6	2⅛	2⅛ 3	Dec. 1864
9600	East Wheal Abraham (copper)	0 5 0	—		Aug. 1864
1190	E. Wheal Agar (cop.), St. Cleer	12 17 0	—		Jan. 1865
1800	E. Wheal Ellen (cop.) St. Agnes	3 5 0	1½	1 1⅛	Dec. 1864
2048	East Wheal Grylls (tin, cop.)	2 15 0	—		Jan. 1865
4000	E. Wh. Russell, Tavis. [S.E.]	9 13 6	4¾	4¼ 4¾	Dec. 1864
6000	East Wheal Vor (tin and cop.)	5 0 0	—		
2000	Erwfelin (lead), [L. £2]	1 0 0	—		
6144	Esther Und. (tin), Cardingham	0 3 10	—		Sept. 1864
6000	Fortescue Con. (sil.), Endellion	0 12 6	—		
6000	Furze Hill Wood Cons., Buckl.	1 5 6	—		April, 1864
1026	Garden, Morvah	5 7 9	1½		Aug. 1864
4096	Garlidna Untd. (tin), Wendron	4 15 0	¾	¾	Jan. 1865
4000	Gawton (copper), Tavistock	2 11 6	—		Oct. 1864
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	—		
30000	Glasgow Caradon Con. (cp.) [L.]	1 0 0	2		Fully paid.
1024	Godolphin (cop., tin), Crowan	0 5 0	—		Oct. 1864
5700	Goginan (silver-lead)	12 10 0	—		April, 1864
2000	Golch Hill (lead), Flintshire	1 4 5	—		No call.
6144	Gonamena (copper), St. Cleer	4 13 0	—	2¼ 2¾	Feb. 1865
2000	Goonzion (copper), St. Neot	1 17 6	—		Dec. 1864
3000	Gothic (silver-lead), Cardigan	1 0 0	—	2⅜ 2½	No call.
486	Gramb. & St. Aub. (cp.) [S.E.]	64 0 0	—		Jan. 1865
5000	Great Brigan (cop.), Redruth	6 14 0	—		Jan. 1865
4096	Great Caradon (cop.), St. Ive	2 16 0	1½	1 1½	Dec. 1864
10000	Great Devon and Bedford [L.]	2 2 6	—		Jan. 1865
3000	Gt. East Lovell (tin), Helston	1 0 0	—		
5000	Great North Downs (copper)	4 3 0	2	1½ 2	Jan. 1865
12500	Gt. No. Laxey (I. of Man) [L. £1]	0 10 0	3¾	3 3½	
6000	Gt. Retallack (sil.-ld., blende)	2 6 6	—		April, 1864
6000	Great S. Chiverton (sil.-lead)	0 10 0	2¼	2⅞ 3⅛	April, 1864
52000	Great Tregune Consols (cop.)	0 5 0	—		
3000	Great West Chiverton (lead)	1 0 0	—		June, 1864
3313	Great Wheal Baddern (tin)	7 17 6	—		June, 1864
6000	Gt. Wh. Busy (cop., tin), Ken.	13 19 6	2		Jan. 1865
3072	Gt. Wh. Grylls (tin, copper)	1 2 6	—		Jan. 1865
10000	Gt. Wh. Metal, Breage [L. £2]	1 0 0	—		
2500	Grit and Stapeley (lead), [L.]	10 0 0	—		July, 1864
4000	Grylls Wheal Florence (tin)	1 0 0	1½	1 1½	
4910	Gurlyn (cop., tin), St. Erth	3 0 3	—		Nov. 1864
6068	Gwydyr Park Con., Llanrwst	1 7 3	—		Feb. 1864
6000	Hallenbeagle (copper)	1 5 0	3½	3¼ 3½	Nov. 1864
6400	Harwood (ld.), Durham [L. £1]	0 6 6	—		Sept. 1864
5000	Havan (ld.), Cardigan [L. £5]	4 5 0	—		July, 1864
7219	Hawkmoor (tin, cop.) Calstock	3 7 6	—		Dec. 1864
10000	Hazel Grove (sil.-ld.) [L. £1] Flint	0 7 6	—	⅜	
5000	Hendre (lead), Flint [L. £5]	3 0 0	—		Nov. 1864
6000	Hingston Down (cop.), [S.E.]	5 10 6	3⅞	3⅜ 3⅞	Dec. 1863
6000	Illogan (tin and copper)	0 13 6	—		Jan. 1865
5000	Kelly Bray (ld.), Callington	5 2 6	—		June, 1864
6000	Keswick (lead), Portinscale	5 6 6	—		Mar. 1862
96	Kilmorey (lead)	25 5 0	—		Feb. 1864
6000	Lady Bertha (cop.) [S.E.]	3 5 0	⅝	⅜ ⅝	Jan. 1865
3000	Lanivet (tin), [L. £2]	2 0 0	—		Fully paid.
1019	Leeds & St. Aubyn (tin, cop.)	17 6 4	—		Feb. 1862
963	Lelant Cons. (tin), Uny Lelant	35 0 0	—		Mar. 1863
4000	Llantwit Vardre (coal), [L. £5]	4 10 0	—		May, 1864
2000	Long Rake (lead), Flint	5 0 0	—		Oct. 1864
2000	Lower Park (ld.), Denbigh [L.]	3 11 0	—		Jan. 1864
6000	Maudlin (copper), Lostwithiel	4 4 0	9		Dec. 1864
4480	Merllyn (lead), Flint	4 1 6	—		June, 1864
3000	Minera Western Boundary [L. £1]	0 2 6	—		Sept. 1863
3000	Mineral Bottom (lead)	3 0 0	—	5 6	
5000	Molland (cop.), S. Moulton	2 9 6	—		Nov. 1862
1024	Nangiles (tin, copper), Kea	20 0 0	18	16 18	Jan. 1865
4000	Nantecs (lead) [L. £1]	0 10 0	—		Sept. 1864
512	Nant Minera (lead), [L. £20]	6 10 0	—		Jan. 1865
6400	Nant-y-Iago (ld.), Merioneth	3 17 6	—		May, 1863
6000	New Clifford [L. £4]	1 5 0	—		Dec. 1864
10000	New Concord (sil.-ld.) [L. £3]	1 0 0	—		
24000	New Cornish [12000 £1 paid, 12000 12s. paid]				Dec. 1864
6400	N. Crow Hill (ld.), St. Stephen	2 13 6	—		Nov. 1864
6000	New East Birch Tor (tin)	0 2 6	—		
6514	New E. Russell (cop.), Tavistk.	0 8 6	—		Nov. 1864
6400	Nether Hearth (lead), Dufton	0 18 6	—		Oct. 1863
400	New Hendra (tin, cop.), Breage	4 1 0	—		Nov. 1864
6400	New Pembroke (tin and cop.)	0 11 0	—		Jan. 1865
1024	New Rosewarne (cop.), Gwinear	2 10 0	—		Dec. 1864
6000	New S. Caradon (cop.), St. Cleer	0 16 6	—		Dec. 1863
5969	New Treleigh (cop.), Redruth	3 3 0	—		Mar. 1864
960	New Trevenen (tin), Wendron	7 14 0	—		Oct. 1864
470	Newtownards Min. Co., Down	50 0 0	—		
1024	New Wendron (tin), Wendron	7 10 0	3½	3 3½	Dec. 1864
1024	New Wh. Grylls (tin and cop.)	2 1 6	—		May, 1863
4096	New Wheal Lovell (tin)	2 5 6	—		Jan. 1865
15000	New Wheal Martha (cop.) [L.]	1 0 0	1½	1 1½	Fully paid.
400	New Wh. Seton (cop.), Camb.	40 15 0	—		Jan. 1865
6000	New Wh. Vor & Metal Utd. (tin)	0 2 6	—		May, 1864
1024	North Buller (cop.), Redruth	27 3 6	—		Dec. 1864
6000	North Chiverton (lead	1 0 0	2¼	2 2¼	
16000	North Devon (sil.-ld.) [L. £1]	0 13 0	—		Oct. 1863
5000	N. Dolcoath (cop.), Camborne	3 4 6	—		Aug. 1864
6000	North Downs (cop.) Redruth	2 16 4	—	2⅜ 2⅝	Nov. 1864
2500	North Frances (cop.)	14 2 6	—		Dec. 1864
1361	N. Grambler (cop.), Redruth	4 15 0	—		Feb. 1865
6000	N. Gt. Work, Breage [L. £3]	2 9 0	—		Aug. 1864
16000	N. Hallenbeagle [8000 £1 pd., 8000 8s. 6d. pd.]				July, 1863
6000	North Jane (tin, silver-lead)	2 9 6	1⅜	1⅛ 1⅜	Aug. 1864
2000	N. Levant (tin, cop.), St. Just	9 3 0	—		Sept. 1864
20000	N. Minera (ld.) [15000 £1 pd., 5000 12s. 6d. pd.]				Aug. 1864
4000	N. Phœnix (cop.) Linkinghorne	4 4 0	—		May,
6400	No. Pool (tin & cop.), Illogan	1 15 8	3⅛	3⅛	Jan.
700	N. Roskear (cop.), Camborne	35 15 0	16	14 16	Jan.
6144	North Rosewarne (copper)	1 0 0	—		Jan.
2000	No. Shepherd (lead), Newlyn	3 0 0	—		Jan.
6000	N. Wh. Basset (cop., tin) [S.E.]	4 8 0	—		Dec.
5610	North Wh. Crofty (cop.) [S.E.]	2 10 6	2	1⅛ 2	Aug.
400	North Wh. Metal (tin), Breage	0 5 0	⅛		Jan.
6144	N. Wh. Robert, Samp. Spiney	3 15 5	—		Dec.
1000	N. Wh. Seton, Camborne [L. £25]	2 10 0	—		July,
12288	Okel Tor (cop.), Calstock	2 3 10	—		Aug.
8465	Pedn-an-drea (tin), Redruth	4 8 6	—		Dec.
5000	Pendeen Cons. (cop.), St. Just	4 9 6	—		Sept.
5000	Penhalls (tin), St. Agnes	2 16 0	—		Aug.
512	Penhallow Moor (silver-lead)	7 0 0	—		Nov.
6000	Penrait (sil. ld.), Merion. [L.]	2 7 0	—		Feb.
6000	Polhigey Moor (tin), Wendron	1 18 0	—		Feb.
12800	Prince of Wales (tin), Calstock	0 6 0	4s.	2s. 4s.	Sept.
6000	Prosper Uni. (tin, cp.), St. Hilary	7 1 6	3⅜	3⅛ 3⅜	April,
10156	Redmoor (cop., tin), Callington	0 14 6	—		Aug.
512	Retanna Hill (tin), Wendron	2 17 6	—		June,
5000	Rhafna (lead), Carnarv. [L. £1]	0 11 0	—		Dec.
6000	Restriggian (iron), St. Wem	—	—		No call
6000	Roborough Down (cop.) [L. £3]	2 0 0	—		Sept.
3998	Rosewarne Consols (copper)	4 11 6	—	29s. 31s.	Feb.
3848	Rosewarne United (cp., tin)	3 16 11	—		Jan.
6000	Roskear (copper), Camborne	0 10 0	—		Sept.
700	Roskearnowth (cop.), Camborne	2 5 0	—		Jan.
2000	Scorrier Con. (tin, cp.), St. Agnes	4 13 6	—		Feb.
800	Segienias, Montgomery [L. £8]	5 15 0	—		Sept.
20000	Snaefell (lead) Isle of Man [L.]	1 0 0	1	¾ 1	Fully
12500	Silver Moun. (lead) [L.]	2 0 0	2		Fully
20000	Sil. Vein, St. Winnow [15000 £1 pd., 5000 5s. pd.]				Jan.
4096	Sithney Wheal Metal (tin)	3 10 0	2	2⅛ 2⅛	June,
12000	Sortridge Cons. (cop.) [S.E.]	1 3 6	—		Dec.
6000	S. Alfred Cons. (cop.), Phillack	0 12 6	—		May,
512	South Basset (cop.), Gwennap	18 10 8	—		Feb.
100	South Bryn Gwiog (lead)	7 0 0	—		J
6000	So. Buller (copper), Gwennap	0 14 0	—		Aug.
4096	S. Caradon Wh. Hooper (cop.)	4 2 6	—		Nov.
6000	South Carn Brea (cop.)	7 19 0	—		Jan.
6138	S. Condurrow (tin, cp.), Camb.	2 19 0	1½	28s. 30s.	Dec.
2283	Sou. Crenver (cop.), Crowan	12 9 0	—		Oct.
6000	South Darren (ld.) [L. £3½]	3 6 6	2	1½ 2	Nov.
6000	S. Dolcoath & Carnarthen Con.	2 13 0	—		Dec.
5000	S. Foxdale (ld.) I. of Man [L. £5]	3 0 0	—		Nov.
2000	South Gorland (cop.), St. Day	4 10 0	—		Jan.
2000	South Grylls (copper) [L. £10]	8 10 0	—		Aug.
1024	S. Herodsfoot (lead) Liskeard	6 2 6	—		April,
96	South Kilmorey (lead)	23 10 0	—		Feb.
2000	South Lovell (tin), Wendron	2 0 0	2⅛	1⅜ 2⅛	No call
4000	S. Minera (lead) [L. £5½	4 0 0	—		July,
96	South Pant-y-Gof (lead)	27 0 0	—		May,
5325	So. Phœnix (cop.) Linkin.	7 1 4	—		Oct.
2000	South St. Ives (tin), St. Ives	0 5 0	—		Nov.
937	So. Wh. Crofty (cop.), Illogan	20 13 10	12	11½ 12½	Dec.
5671	South Wheal Leisure (copper)	0 13 0	—	5	
400	So. Wh. Seton (cop.), Camborne	55 13 0	8	6 7	Feb.
794	Spearne Cons. (tin), St. Just	6 12 0	—		Mar.
10000	St. Cuthbert Lead Smelt. [L.]	5 0 0	—		Fully
40000	St. David's (gold) [L. £2 10s.]	1 5 0	—		Nov.
900	St. Ives Wheal Allen (tin)	15 0 0	—		Nov.
8000	St. Just Untd. (tin) [L. 2½]	2 0 0	—		Dec.
6000	St. Just Consols (tin) [L. £1]	0 17 0	—		Oct.
640	Stamp Office (lead), Mold	1 0 0	—		Jan.
920	Stray Park (cop., tin) [S.E.]	34 15 6	15	11 12	Nov.
3500	Tin Hill (tin), St. Austell	0 17 0	—		Sept.
6000	Tolcarne (cop.), Camborne	2 2 0	—		Aug.
6000	Tolvadden (copper), Marazion	1 0 0	—		
5000	Treloweth (copper), St. Erth	7 18 8	—		Jan.
1024	Trencrom (tin), Uny Lelant	12 12 3	—		Jan.
501	Tresavean and Trethurrap	13 10 0	7	5 7	Dec.
3105	Tresellyn and Scaddick Cons.	1 12 6	—		July,
5600	Trevenen and Tremenheere	7 4 6	—		Dec.
4096	Treweatha (sil.-ld.), Menhen.	5 12 0	—		Jan.
2048	Treworlis (tin), Wendron	6 15 1	—		Oct.
2500	Trimley Hall [1250 £1 pd., 1250 17s. 6d. paid]				Oct.
4000	Trumpet Unit. (tin), Wendron	1 9 6	—		Jan.
6400	Tyne Head (tin & cop. [L. £1]	0 17 0	—		Sept.
20000	Vale of Towy (lead), Carmar.	0 16 6	—		Oct.
10000	Walkham & Poldice (tin) [L.]	1 0 0	—		Fully
4000	Wentnor [L. £2¼] (lead)	2 4 6	—		Oct.
3000	Wentworth Consols (lead)	3 0 0	8⅛	8 8⅛	
60000	Welsh Gold, Dolgelly [L.]	1 0 0	—		Fully
20000	West Beam (tin) [L.]	1 0 0	—		Fully
40000	West Clogau (gold), Merioneth	1 0 0	—		Fully
1000	West Cwm Erfin (lead) [L]	2 0 0	—		Oct.
1218	W. Condurrow (tin, cop.), Cam.	9 8 11	—		Dec.
3500	W. Great Work (tin), Germoe	2 4 9	—		Dec.
6000	W. Grylls (tin), Perranuthnoe	0 4 0	—	1	Nov.
12000	W. Maria & Fortescue, Lamerton	1 0 0	—		May,
500	West Nanty (lead) [L.]	10 0 0	—		Oct.
19000	West Par Con. (cp.) St. Blazey	2 17 0	—		Aug.
1000	W. Rose Down (cop.), Caradon	13 7 6	—		Jan.
256	West Sharp Tor (cp.) Rillaton	164 0 0	—		Dec.
1056	West Stray Park (cop.), Camb.	10 6 6	—		Dec.
512	West Tolgus (cop.), Redruth	40 0 0	62½	57 62	Oct.
5481	West Trevelyan (tin, copper)	4 3 10	—		Mar.
512	West Wh. Frances (cop.), Illo.	92 5 0	21	19 21	Aug.
9017	West Wheal Jane (tin, &c.)	3 19 6	—		Jan.
5000	West Wh. Kitty (tin), St. Agnes	0 7 0	—		Aug.
10000	W. Wh. Martha (cp. & sil.) [L. £2]	1 5 0	—		July,
4096	West Wheal Vor (tin), Helston	1 10 0	—		Mar.
6000	Wheal Agar (copper), Illogan	5 18 0	2	1 1½	Dec.
3000	Wheal Albert (copper)	1 5 0	—		
5790	Wh. Arthur (cop.), Calstock	4 15 6	—		Nov.
256	Wheal Buller, Redruth [S.E.]	30 0 0	—		Jan.
6000	Wh. Caradon (cop.), St. Ives	2 7 6	—		Dec.
1000	Wheal Curtis (cop.), Crowan	9 18 4	—		Nov.
6000	Wheal Crebor (cop.), Tavistock	1 14 6	2	1⅞ 2	Nov.
6000	Wheal Crofty (cop.), Illogan	1 9 6	—		Oct.
6144	Wh. Damsel (cp., tin), Gwennap	2 15 0	—		July,
4096	Wh. Edward (cop.), Calstock	8 14 6	—		Oct.
1024	Wheal Emily Henrietta (cop.)	13 5 0	—		Nov.
4000	Wh. Emma (cp) Buckfastleigh	3 10 0	1	¾ 1	Jan.
2000	Wheal Falmouth & Sperries	7 0 0	—		Oct.
6000	Wh. Grenville (copper) [S.E.]	8 14 0	3	2¾ 3	Aug.
1024	Wh. Grylls (tin), Perranuth.	7 4 0	—		Jan.
5120	Wh. Harriett (cop.), Camborne	4 14 6	—		Jan.
6000	Wheal Hartley (cop.), Gwinear	1 2 6	⅜	⅛ ⅜	Mar.
3648	Wheal Hearle (tin), St. Just	3 5 0	—		Aug.
4096	Wheal Hope (sil.-ld.), Perran	2 3 9	—		Jan.
6000	Wheal Ida (sil.-lead), St. Ive	0 12 0	—		Jan.
4800	Wh. Ludcott and Wrey (lead)	3 18 8	½		Nov.
968	Wheal Margery (tin, copper)	20 6 10	—		Dec.
1000	Wh. Mary Hutchings (Plymp.)	0 14 0	—		Nov.
6000	Wh. Norris (tin, cp.), St. Cleer	3 17 7	—		Nov.
1024	Wheal Par (tin), St. Blazey	7 6 0	—		Nov.
6000	Wh. Pollard (cop.), St. Neot's	3 3 6	—		April,
1024	Wheal Polmear (copper)	4 13 9	—		Oct.
970	Wh. Prosper (cp., tin), Breage	14 18 10	—		Dec.
25000	Wh. Prudence St. Ag. [L. £1]	1 0 0	—		Fully
240	Wh. Reeth (tin), Uny Lelant	96 10 0	—		Sept.
2000	Wheal Rose (copper), Scorrier	—	32	30 31	
1500	Wheal Sarah (tin), Lanivet	0 13 8	—		June,
4096	Wheal Sidney (tin), Plympton	5 3 1	—		July,
2048	Wh. Sithney & Carnmeal Uni.	13 6 6	—		Nov
6000	Wheal Sparnon (copper)	0 18 0	—		Oct
1920	Wh. Trannack (cop.), Sithney	1 10 9	—		Jan
1200	Wh. Trevenna (tin, cop.) [L. £10]	5 0 0	—		Dec
6000	Wheal Union (cop.), Redruth	4 14 6	¾	⅛ ¾	Oct
6000	Wh. Unity (cop., tin), Gwinear	14 19 0	⅜	4s. 6s.	Nov
4096	Wh. Uny (tin, cop.), Redruth	9 17 0	2⅛	2 2⅛	Dec.
4500	Wheal Vlow (tin)	1 5 0	—	1¾ 2	Nov.
1024	Wh. Vyvyan (cop.), Constantine	9 15 0	—		Aug.
994	Worvas Downs (tin), Lelant	7 7 0	—		June,
3097	Yarner (copper), Devon	3 18 6	—		Dec.

MISCELLANEOUS.

Shares	Name	Paid	Last Pr.	Bus. done	Last Call
20000	Anglo-Mexican Mint	10 0 0	18½	17 18	
40000	Brit. & For. Min. Finan. [L. £25]	2 10 0	2¾	2¼ 2¾	
20000	City Offices [L. £50]	7 10 0	6¼	5 5¼	Nov.
10000	Discount Corporatn. [L. £100]	17 10 0	14½	13½ 14½	
80000	Ebbw Vale Iron Co. [L. £50]	5 0 0	4	3⅞ 4	
10000	Gellivara Iron [L. £50]	10 0 0	3	1 2	
250000	Gen. Cred. & Fin. Lond. [L. £20]	4 0 0	7⅛	6⅞ 7⅛	
20000	General Steam Navigation	14 0 0	27	25 27	
20000	Humber Ironworks [L. £50]	8 0 0	4	2 4	
100000	Imperial Mercan. Cred. [L. £50]	5 0 0	7⅛	7⅛ 7⅛	
150000	Inter. Financial Soc. [L. £20]	5 0 0	7⅛	7 7⅛	
80000	Joint-Stock Discount [L. £25]	10 0 0	9⅛	9 9⅛	
40000	Millwall Ironworks	5 0 0	4¾	4¼ 4¾	
10000	National Financial [L. £50]	5 0 0	6	5 6	
12000	Nerbudda [L. £20] [6000 £5 pd., 6000 £2 pd.]				
30000	Nova Scotia Gold & Land [L.]	2 0 0	—		Fully
40000	Smith, Knight, & Co. [L. £50]	5 0 0	—	4¼ 4¾	

*** Those mines with [S.E.] appended have been admitted on the Stock Exchange. Those mines with [L.] appended have been incorporated w[ith] Limited Liability.

*** Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or [...] tion which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we app[eal for] information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their office, No. 26, FLEET STREET, E.C., where all com-munications are requested to be addressed.—*February* 11, 1865.